University of Nebraska Medical Center

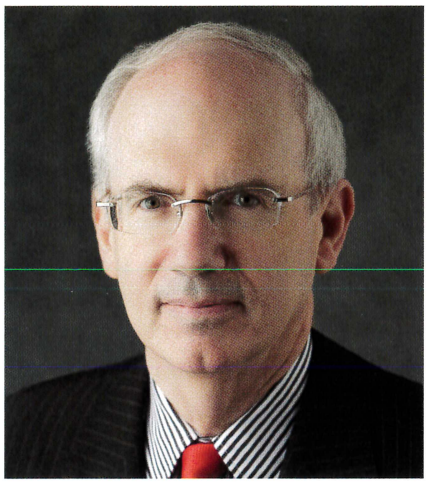
CONNECT

FOR ALUMNI & FRIENDS

WINTER 2018

iEXCEL:
Dawn of a digital renaissance

Educating Millennials in Health Professions



Thank you for reading this latest issue of Connect. I hope you, like me, are impressed with its bold, yet refreshing, new look.

But, as I thumb through the pages, I am delighted to find it is still the same Connect magazine I have grown to love.

It's a reminder that we, as an organization and as individuals, can remain true to our core values, and retain the best of ourselves, while simultaneously finding new, exciting ways with which to improve.

We see it all the time at our medical center. You'll see examples of this in this very magazine. Read about the latest updates on the Dr. Edwin Davis and Dorothy Balbach Davis Global Center, which will open in 2019.

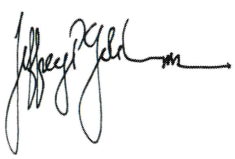
Within this magnificent facility, students and educators will strive for excellence with iEXCEL advanced simulators and the latest in high tech virtual and augmented reality.

But, they will do so while remaining true to the very core of health care. The importance of human touch.

This magazine also features a handful of new faces – the fresh lifeblood that comes to us through our array of pipeline programs. These young students are themselves bold and refreshing. They constantly bring us new ideas, enthusiasm and, quite literally, help us update our look.

And, they become part of our foundation. As we watch them learn, grow, then take flight, we are reminded of who we are and why we do what we do.

Like this magazine, UNMC strives for improvement, while always remembering who we are and why we do what we do.



Jeffrey P. Gold, M.D.
UNMC Chancellor

COMING SOON

Editor's Note: UNMC Connect soon will have a new online presence at unmc.edu/connect. We'll notify you through social media channels when it goes live. As always, we welcome your feedback and story ideas.

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UNMC is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools (HLC-NCA) and enjoys full accreditation of all its professional academic programs.

We are Nebraska Medicine and UNMC. Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care.

The University of Nebraska Medical Center does not discriminate in its academic, employment or admissions programs, and abides by all federal regulations pertaining to same.

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IN THE LOOP

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Match Day

April 5-28, 2019
Nebraska Science Festival

Ashley Wysong, M.D., leads UNMC's new comprehensive dermatology program.

New dermatology program to benefit Nebraskans

Nebraska has one of the lowest ratios of dermatologists in the country with only one dermatologist for every 52,000 people. The ratio recommended by the American Professors of Dermatology is one dermatologist for every 20,000 to 30,000 people.

That is about to change.

Ashley Wysong, M.D., is building a comprehensive dermatology program to serve the state and beyond. Since arriving on campus May 1, the department's founding chair has recruited three board-certified dermatologists and a post-doctoral research fellow to her UNMC/Nebraska Medicine dermatology team. Over the next five years, she plans to recruit a minimum of eight dermatologists to the department.

Dr. Wysong comes to Nebraska from the University of Southern California, where she worked the past four years as director of Mohs and Dermatologic Surgery. But, she has Midwest roots – she's a native of Nevada, Mo., and her paternal grandfather was born in Bayard, Neb.

In June, she attended the Cattlemen's Ball near Hebron, Neb., and helped staff the skin cancer screening booth. Over the course of the day, she observed three individuals with suspected melanoma, the deadliest form of skin cancer, and 12 others with suspected skin cancers.

"There's an epidemic of skin cancer in the U.S.," she said. "The need for dermatologists is overwhelming."

In addition to clinics, Dr. Wysong plans to start a tele-dermatology program to allow UNMC/Nebraska Medicine to meet the dermatologic needs of rural Nebraska.

"We're going to make a difference."

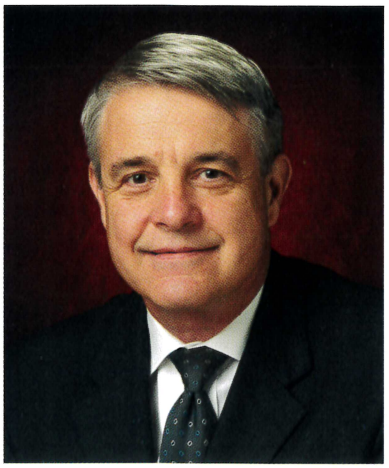
Nebraska Medicine names new CEO

In August, the Nebraska Medicine Board of Directors named James Linder, M.D., the new chief executive officer of Nebraska Medicine, UNMC's primary clinical partner. Dr. Linder replaces Dan DeBehnke, M.D., MBA.

"Dr. Linder's past service as a practicing physician, his leadership in health care as well as his highly engaged role as a member of the Nebraska Medicine board makes him uniquely suited for this position," said Jeffrey P. Gold, M.D., chairman of the Nebraska Medicine board and chancellor of the University of Nebraska Medical Center and the University of Nebraska at Omaha.

A native Nebraskan, Dr. Linder earned a Bachelor of Science degree in biochemistry and microbiology from Iowa State University and his medical degree with distinction from UNMC. He completed his residency training in pathology at Duke University Medical Center and at UNMC.

Dr. Linder has served as a member of the hospital medical staff for many years as a practicing pathologist. He has previously served in the role of the interim dean of the UNMC College of Medicine and as the interim president of the University of Nebraska system from 2014 through 2015.



James Linder, M.D.

UNMC's $135 million in research funding sets record

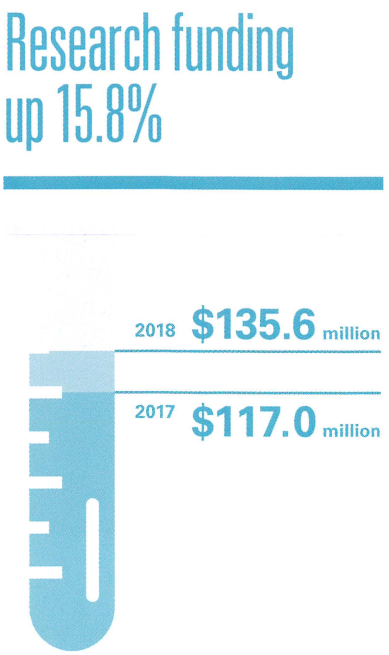
UNMC researchers have set a new record – bringing in $135.6 million in research funding for fiscal year 2018, up 15.8 percent from $117 million the previous year.

"Kudos to our research community for their success and hard work," said Jennifer Larsen, M.D., vice chancellor for research at UNMC. "Everyone contributed to this accomplishment. We have recruited and mentored outstanding faculty, successfully competed for large grant awards, and many people – from administrators to research technicians and coordinators – have worked hard alongside the investigators to make this happen."

Dr. Larsen said UNMC saw increases in the total number of grants, the number of unique principal investigators, the total number of faculty on grants, the average size of grants, and the number of large grants such as center grants.

The following units saw double digit increases in their research awards: the Eppley Institute for Cancer Research (19.5 percent), the Munroe-Meyer Institute (39.3 percent), and the Colleges of Dentistry (32.2 percent), Medicine (11.4 percent), Pharmacy (10.7 percent), and Public Health (63.4 percent).

Awards from federal agencies increased 15 percent overall, either as primary awards (11.8 percent; 90 percent of which came from the National Institutes of Health); or subawards, which include federal awards from other universities, the University of Nebraska (21 percent) or others (12 percent). U.S. Department of Defense awards through the National Strategic Research Institute increased 43 percent.



Finding a better hernia mesh

UNMC faculty Mark Carlson, M.D., and Jingwei Xie, Ph.D., are working together on a solution for a better hernia mesh. And they think they may have found it.

Holes in the abdomen can't always be effectively sewn together, so they require a patch or "mesh." Physicians mainly use synthetic materials – plastics, which can cause adverse reactions, or "biologic mesh," derived from tissue such as skin, which is more body-friendly but prohibitively expensive.

Dr. Xie, a biomedical engineer in the UNMC Department of Surgery and Holland Regenerative Medicine Program, and Dr. Carlson, a surgeon-scientist who has a dual appointment at UNMC and the VA Nebraska Western-Iowa Health Care System, are developing a mesh engineered from man-made materials – synthetic polymers. But, which they believe will be friendlier to living tissue.

"The secret sauce is how you put (the particles) together," Dr. Carlson said. "Dr. Xie is able to control things at the nanoscale."

This means chemistry at the molecular level to give the mesh "in vivo," or living, characteristics. Its highly porous structure allows optimal cell and tissue growth. "The surface composition and nanotopography reduce the adhesion formation," Dr. Xie said.

Native tissue would incorporate it and form firm attachments. "The tissue actually grows into it — and that reduces the risk of infection and strengthens the native tissue," Dr. Carlson said.

The idea, and its initial preclinical data, have resulted in a grant from the Otis Glebe Medical Research Foundation. The team will test the mesh in porcine models in hopes of heading toward FDA testing and approval. And, they are working with UNeMed, UNMC's technology transfer arm, to apply for a provisional patent of the technology. With further preclinical data, the team could partner with a private company, to keep the research moving, or apply for a small business grant.

Ewald named senior business officer for UNO, UNMC

Doug Ewald

Following a national search, Doug Ewald was named the new vice chancellor for business, finance and business development for the University of Nebraska at Omaha (UNO) and UNMC, effective Aug. 1.

Ewald will serve as senior business officer on both campuses, advising Chancellor Jeffrey P. Gold, M.D., and overseeing all budget, finance, operational and administrative services.

"We are tremendously pleased to welcome Mr. Ewald to UNO and UNMC," Dr. Gold said. "His considerable financial experience and expertise will be an asset to both campuses as we continue to operate strategically and efficiently, plan for campus growth, and innovate to further grow Nebraska's economy."

The UNO/UNMC business and finance units have approximately 600 employees. The position also will be responsible for all business development activities for UNO and UNMC. These responsibilities include administrative leadership of a broad spectrum of business development, such as UNeMed, as well as core university finances.

Ewald comes to the position with nearly 30 years of administrative experience at such companies as Union Pacific, KPMG and Ameritas. Appointed by Gov. Dave Heineman, he also served as tax commissioner for the State of Nebraska from December 2006 to October 2013. A UNO alumnus, Ewald graduated with an MPA in accounting in 1987.

"Doug's enthusiasm, knowledge and business experience will serve us well in supporting the university's mission and service to Nebraska," said Don Leuenberger, interim vice chancellor for business and finance for UNO and UNMC and chair of the search committee.

UNMC alumnus named dean of the UNMC College of Pharmacy

Keith Olsen, Pharm.D., currently the dean of the University of Arkansas for Medical Sciences College of Pharmacy, has been named the eighth dean of the UNMC College of Pharmacy.

Dr. Olsen will begin Jan. 7, pending approval of his appointment from the University of Nebraska Board of Regents. An alumnus of the UNMC College of Pharmacy, Dr. Olsen was on the college's faculty from 1993 to 2015. He is a native of Laurel, Neb., and graduate of Wayne State College.

Dr. Olsen succeeds Courtney Fletcher, Pharm.D., who oversaw the rise of the college as a research powerhouse, and the planning, construction and opening of the UNMC Center for Drug Discovery and Lozier Center for Pharmacy Sciences and Education. Dr. Fletcher will remain on faculty and continue his research.

During his more than two decades on the UNMC faculty, Dr. Olsen rose to chair of pharmacy practice, and was named full professor based primarily on a robust research portfolio - while also earning the college's Distinguished Teacher Award multiple times.

Keith Olsen, Pharm.D.

At Arkansas, Dr. Olsen led a pharmacy school with approximately 480 students, 160 employees, including 13 residents, 22 graduate students and 72 faculty. The college also operates the Arkansas Poison and Drug Information Center and its Evidence-Based Prescription Drug Program (EBRx). He brings with him valuable executive experience in research, education, budgeting and alumni relations and development. He also was a critical care specialist for the UAMS Clinical Enterprise.

An expert in critical-care medicine, he served consecutive terms on the Board of Regents of the American College of Critical Care Medicine. He currently serves as chancellor of that organization, the first pharmacist to do so.

Cleveland Clinic ophthalmologist to head med center ophthalmology program

Ronald Krueger, M.D.

An internationally recognized eye surgeon from one of the top eye institutes in the country – Ronald Krueger, M.D. – has been named the McGaw Professor and Chair of the UNMC Department of Ophthalmology and Visual Sciences and director of the Stanley M. Truhlsen Eye Institute, whose clinical programs are part of Nebraska Medicine.

Dr. Krueger is professor of ophthalmology in the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, and medical director of the Department of Refractive Surgery at the Cole Eye Institute of the Cleveland Clinic.

The Cole Eye Institute has consistently ranked among the top 10 eye institutes in the U.S., while the Cleveland Clinic is the No. 2 ranked hospital in the country by U.S. News & World Report.

Dr. Krueger is expected to begin in April or May, said Bradley Britigan, M.D., dean of the UNMC College of Medicine who announced the appointment, which is subject to approval of the University of Nebraska Board of Regents.

Dr. Krueger has performed more than 25,000 vision correction procedures, which are performed to reduce or eliminate an individual's dependency on glasses or contact lenses. These procedures include laser vision corrections, such as LASIK, PRK and SMILE, as well as lens-based procedures such as ICL, lens replacement and cataract surgery. He also manages complex optical disorders of the eye and keratoconus through a variety of medical and surgical treatments.

Dr. Krueger plans to expand both the clinical and research faculty at the Truhlsen Eye Institute and Durham Research Center. He also will strive to unify the ophthalmology community in Omaha through an initiative that he refers to as the "Unity in Community" model, which he hopes will brand Omaha as an eye health care hub based on its high standard of eye health care and significant eye innovation.

college

College of Dentistry

- Thanks to a $4 million, 10-year contract from the state of Nebraska Oral Health Training and Services Fund, the college continues to expand oral health services for children and adults in Nebraska. The number of patient visits provided by the college increased by more than 12 percent the first year of the contract award. This reflects increased oral health services at the college's intramural clinics, as well as its extramural (rotation) sites, new and expanded oral health initiatives, partnerships and expansion of teledentistry.
- In August, the University of Nebraska Board of Regents approved a $2.6 million renovation of the Adult Dentistry Clinic located at the Durham Outpatient Center on the UNMC Omaha campus. The clinic will expand from seven dental chairs to 15, and will provide space for the current general practice residency program, a proposed new advanced education in general dentistry residency program, and rotations for dental and dental hygiene students. The project will be completed by late June 2019 and is funded by UNMC construction funds and College of Dentistry clinical revenue.
- The faculty in the College of Dentistry saw a double-digit increase of 32.2 percent in research award funding in FY2018 compared to FY2017. These collaborative research awards include both clinical research grants (e.g., clinical trial of oral hygiene gels), as well as basic science awards (e.g., signaling pathways in palatal degeneration).

College of Medicine

- As of July 1, 181 new UNMC house officers joined the continuing house staff: 41 percent are women and 24 percent graduated from the College of Medicine. In all, UNMC has a total of 533 residents and fellows, of which 187 positions are in primary care. UNMC has 55 ACGME-accredited programs, as well as its ADA-accredited program of oral surgery. A new residency in physical medicine and rehabilitation began in July with six new residents.
- The Wigton Heritage Center will be built in conjunction with the renovation of Wittson Hall on UNMC's Omaha campus. Major funding was committed by Robert Wigton, M.D., a 1969 alumnus of the College of Medicine who served as associate dean for graduate medical education at UNMC and the "unofficial campus historian." The center will tell UNMC's story through gallery and digital exhibit space; display the McGoogan Library's vast special collections, artifacts, archives and rare books; and expose University Hospital's historic façade and iconic columns within a planned atrium that will serve as a welcoming space for alumni, visitors and students. Completion is expected in July 2021.

College of Nursing

- The college welcomed two new assistant deans: Amy Hoffman, Ph.D., assistant dean for the Omaha Division (formerly at the Michigan State University College of Nursing), and Kelly Betts, Ed.D., assistant dean for the West Nebraska Division (formerly at the University of Arkansas for Medical Sciences College of Nursing).
- Kate Fiandt, Ph.D., received a $2.6 million grant from the U.S. Health Services Resources Administration to educate students in the undergraduate nursing program in primary care settings and provide continuing education for nurses in primary care. Faculty and students will work with nurse-led clinics at North Omaha Area Health, Franklin County Memorial Hospital and with the Health Center Association of Nebraska.

College of Pharmacy

- Rankings compiled by the American Association of Colleges of Pharmacy find UNMC finished 10th among U.S. pharmacy schools in National Institutes of Health research dollars with more than $10.5 million in funding. With only 40 full-time faculty, the college is one of the nation's smallest among the 138 accredited U.S. schools and colleges of pharmacy.
- The college welcomed two new clinical assistant professors: Logan Franck, Pharm.D., and Drew Prescott, Pharm.D., in the department of pharmacy practice. Both will join the Nebraska Medicine Ambulatory/Primary Care Patient Centered Medical Home team.

College of Public Health

- This fall, the college launched a Master's of Health Administration program. The MHA provides in-depth multidisciplinary education in leadership, collaboration and analytics, with the goal of placing all graduates with leading health care organizations.
- Brandon Grimm, Ph.D., has been named associate dean of practice for the College of Public Health. Dr. Grimm will prepare

roundup

the next generation of public health practitioners, maintain and enhance the college's relationships with current public health leaders, and maintain its momentum in becoming a world-class public health institution.

Eppley Institute/Fred & Pamela Buffett Cancer Center

- Dalia ElGamal, Ph.D., joined the Eppley Institute earlier this year as an assistant professor. She researches B-cell malignancies such as chronic lymphocytic leukemia and Richter's transformation, and evaluates novel targeted anti-cancer therapies.
- The 2018 Cattlemen's Ball of Nebraska brought in nearly $1.75 million – the second-highest total ever raised in the 21-year history of the event and the seventh time the event has topped the $1 million mark. Since its inception, the event has raised more than $15.8 million. The event was hosted by Randy and Becky Hergott of Hebron, Neb., with Rob and Natalie Marsh serving as co-hosts. Of the $1.75 million, more than $1.55 million went to the Fred & Pamela Buffett Center for cancer research with the remaining 10 percent ($174,000) staying in the home county for a variety of programs. The 2019 Cattlemen's Ball will be held June 7-8 near Wauneta, Neb.

Munroe-Meyer Institute

- In June, the University of Nebraska Board of Regents approved the move and rebuilding of the Munroe-Meyer Institute for Genetics and Rehabilitation from its existing location on the UNMC Omaha campus to the former First Data building on Pine Street, located on the University of Nebraska at Omaha's Scott Campus.
- The Regents also approved a master of arts degree in psychology with a concentration in applied behavior analysis program, which is a collaboration between the UNO Department of Psychology and the MMI Psychology Department.

College of Allied Health Professions

- The Thayer family – an anchor in health care in the Grand Island area for many years – made a $500,000 donation to endow scholarships for allied health students. That $500,000 became $1 million when it was matched by the Charles R. O'Malley Charitable Lead Trust. It's the latest, and largest, addition to an endowed scholarship program established by the college and the O'Malley Trust in 2017. The scholarships help increase opportunities for underrepresented students from across Nebraska to become health care professionals. The Thayer gift honors two family matriarchs: the late Jan Thayer, a University of Nebraska-Lincoln alumnus who brought assisted living to Nebraska in the early 1980s, and her mother-in-law, Emma Thayer.
- Lisa Barthenhagen, who joined UNMC in 2000, was named chair of the medical imaging and therapeutic sciences department in January 2018.
- Betsy Becker, Ph.D., D.P.T., has been promoted from associate director to director of physical therapy education. She succeeds Joseph Norman, Ph.D., who is stepping aside to spend more time with family. He will remain on faculty. Dr. Becker's appointment is effective Jan. 1, 2019. Her scholarly agenda focuses on education and chronic disease management.

Library offers a listen into oral history project

Voices from UNMC's past and present can be heard telling stories about their experiences at the med center through the McGoogan Library's new oral history program.

Listen to Dr. Harry McFadden tell about his medical school interview with Dr. C.W. Poynter, dean of the College of Medicine, or Dr. Myrna Newland's experience working in a medical library.

Beginning in the 1980s, former library director Bernice Hetzner and Frank Menolascino, M.D., conducted several oral histories, which have been digitized by the library and Robert Wigton, M.D., who continued conducting oral histories in the early 2000s.

Now, the library is capturing additional stories from UNMC leaders and providing online access to the videos and transcripts. Nearly two dozen individuals are featured online.

Recent histories include James Armitage, M.D.; Virginia Grissom; Gerald Moore, M.D.; James Newland, M.D.; Myrna Newland, M.D.; Rowen Zetterman, M.D.; and David Crouse, Ph.D., among others. Upcoming interviews to be released include Mary Haven; Rosalee Yeaworth, Ph.D.; and Dr. Wigton.

Visit unmc.edu/connect for link to oral history program.

INVENTOR HAS AN EYE FOR CHALLENGES

by John Keenan

The Suh Precision Syringe, patented in 2017, is designed for one-handed, precision injections.

When Donny Suh, M.D., sees a barrier, it excites him.

Dr. Suh (pronounced saw), a pediatric ophthalmologist and an associate professor of ophthalmology and visual sciences at UNMC, is no stranger to barriers. As a child in Korea, he remembers his mother grappled with eye issues.

"We were trying to get help, and it was difficult, because of the transportation, finances – I just remember feeling hopeless and weak," he said. "So now I'm in a situation where I can assist and help people who are in a similar situation, and I want to devote the rest of my career helping and providing hope."

One way Dr. Suh helps is through his innovations. He currently is working on his seventh patent, all for inventions, such as a syringe designed for one-handed use, meant to overcome obstacles for patients or to improve patient care.

"I am always thinking of ways to improve," he said. "What can we do to the current surgical equipment to make it better and safer?"

His first patent was for an instrument he designed more than a decade ago, known as the Suh eye-muscle hook.

"Eye surgery is extremely delicate, and there's a limited view of the eye and eye muscles," he said. "This equipment increases the visibility of the surgeon, and it protects the eye so the chance of perforating the eye becomes dramatically lower. It also decreases the infection rate.

"This equipment is essential for those who perform complicated eye muscle surgeries. It's being used around the world."

Dr. Suh, who also is chief of pediatric ophthalmology and adult strabismus at Children's Hospital & Medical Center in Omaha, said being at UNMC and in the University of Nebraska system, with a community of talented collaborators, and having access to UNeMed, UNMC's technology transfer arm, makes innovation easier. In fact, he patented the Suh eye-muscle hook only after he joined UNMC and had access to UNeMed's expertise in the area.

"It took me almost six years to make the Suh eye-muscle hook because I had to work on my own and there were a lot of obstacles," he said. "But since I joined UNMC, I've met many people with amazing talents. So with teamwork, I was able to create more things in a much more efficient way.

"I'm extremely fortunate to have encountered many of the researchers here in the university, and the amount of talent and innovation and enthusiasm that we have is contagious," he said. "My passion for treating patients and teaching students was always there, but with the tremendous support from the research department, my research has grown dramatically."

Dr. Suh helps improve the eyesight of people around the world.

Dr. Suh is careful to point out that his inventions and patents are the result of a team effort.

"That makes it enjoyable, and a lot more productive," he said. His co-inventors "help me to cover my blind spots or weakness. Before, I didn't know my blind spots, but now, working with others, they're covering mine and I'm covering theirs. So together, we're much stronger."

Currently, Dr. Suh is working on several new innovations.

They include:

- An improved version of microtia glasses, used by children without ears or with micro- or macroencephaly;
- Changes to ophthalmological surgical glasses, or loops, designed to decrease the weight and eliminate potential neck, back or shoulder problems for surgeons; and
- A smartphone retinal camera that could take photos and videos of retinal images to diagnose retinal lesions, detached retina and retinoblastomas.

"I've never avoided obstacles," he said. "As matter of fact, I prefer a harder road. We only have one life, and I don't want everything to be on a silver platter – I want to work for it."

Dr. Suh finds his ability to help people through research and innovation exciting.

"I feel very fortunate – if I was born even 20 years earlier, I would have missed this great opportunity of exciting technology," he said. "We all have purpose and mission. You just have to find it. Mine is helping and educating people, and with the collaborators and technology that's readily available to me through my connection to UNMC, I can fulfill that mission."

HEALTH CARE IN 3-D

by Karen Burbach

Technology has come a long way since Princess Leia's holographic image appeared before Obi-Wan Kenobi in the original "Star Wars" movie. And, science fiction that seemed fantastical in the 1977 blockbuster is now reality. Today, in high definition, you can travel through the chamber of an oversized 3-D heart to better understand, and correct, genetic defects. You can visualize abnormalities of the brain using a medical hologram, which allows you to walk around the organ – that appears to be suspended in space – for a truly realistic-looking image.

Augmented and virtual reality are among the fastest growing sectors of the economy – moving well beyond gaming and entertainment worlds and into business and education.

Now, UNMC intends to be a leader in the revolution of health care education.

Already, through its its Interprofessional Experiential Center for Enduring Learning (iEXCEL℠) initiative, UNMC faculty and students use mind-boggling technology to create new educational content and improve human performance and patient outcomes.

And, as aviation simulation changed the flight industry, iEXCEL has the potential to propel the training of doctors, nurses and allied health professionals into the next generation with emerging virtual and augmented reality. Learning opportunities will further grow when, in 2019, the iEXCEL initiative moves into a new high-tech facility – the Dr. Edwin G. and Dorothy Balbach Davis Global Center.

There, students will travel between floors to master their clinical and surgical skills using sophisticated simulators, lifelike holographic images and immersive environments.

In the meantime, UNMC is forging ahead in a prototype visualization hub, where faculty, staff and students create and apply high-quality medical visualization content to the education and training of health care professionals – in formats ranging from augmented and virtual reality to holographic imagery. Meet a few iEXCEL champions now.

• Paul Dye, a graphic arts visualization specialist on the iEXCEL team, helps bring health care education content to life. "We're limited only by the academic's imagination. There's not a lot we say 'no' to – it's more about the amount of work that goes into it, but nothing is too fantastical.

"What excites me? Well, we have access to technology you don't have anywhere else, at least in Nebraska. We work on content for the virtual reality headset and holographic theater – where else can you do that?"

• Robert Norgren, Ph.D., sees parallels in iEXCEL and 'programmed learning' – once popular for its self-paced, self-administered instruction, which was presented in logical sequence with repetition of concepts. It was, in fact, programmed learning in the '70s that piqued Dr. Norgren's interest in neurosciences and neuroanatomy.

"People thought it was a better way to learn and now we can do it, digitally, in a more elegant way." As a result, Dr. Norgren, a professor in the UNMC Department of Genetics, Cell Biology & Anatomy, is working with the iEXCEL team to create an interactive bundle of digital neurosciences resources.

"I'm most excited about letting students interact with the material. Students, today, like to test and work through things themselves. They're really comfortable interacting with digital media on their own time.

"I've been using 3-D animation since the early 1990s, but it was '90s technology and the resolution was really poor – it's something people laughed at. iEXCEL uses better animation and resolution and is more elegant. It's something I've been waiting for so I'm glad it's available.

Augmented reality vs. virtual reality

In augmented reality, technology generates images or information that can be layered on top of real-world objects – think Pokeman Go. It differs from virtual reality, which creates a completely immersive, artificial scene - think simulating a skydiving experience while standing in your living room.

Uniquely Nebraska

As the new headquarters for iEXCEL, the Davis Global Center will provide almost 200,000 square feet of clinical simulation, surgical skills training and advanced visualization space. And, it will mark its opening with the:

- First-in-the-world, five-sided, laser-based immersive environment (iEXCEL Laser CAVE-5).
- First holographic theater in an academic setting.
- 13 realistic clinical environments within clinical simulation, including ambulatory, emergency department, trauma, intensive care, labor/delivery, pediatrics.
- 21 operating room environments within surgical skills simulation.
- First 200-degree digital touch environment (iEXCEL Helix).
- The National Center for Health Security and Biopreparedness. Funded by the U.S. Department of Health & Human Services, the center will enable UNMC to teach federal health care personnel procedures in diagnosing and treating highly infectious diseases.
- Continued outreach of four Simulation-in-Motion Nebraska trucks used to teach lifesaving skills to rural emergency medical service providers and providers at critical access hospitals throughout the state. Since the summer of 2017, SIM-NE has held more than 200 training events and trained more than 3,600 providers across the state.
- The EON Reality VR Innovation Academy. Housed on the UNMC campus in Omaha, and in partnership with EON Reality, this workforce development program gives students the opportunity to learn the fundamentals of AR/VR, 3-D modeling, animation, mobile applications, project management and more. The first cohort of students entered in June 2018 and will graduate in May 2019.

"Professors bring the expertise and content knowledge, which can't be replaced by anyone else. I'm not a graphic artist or an animator. I don't know the technology. You need both the content side and technical side so that it becomes a partnership with the iEXCEL team to turn the curriculum into an interactive experience."

• With iWall technology, UNMC nursing students across the state can learn to give insulin injections, said Beth Culross, Ph.D. The iEXCEL team is developing syringe imagery to show on the iWall so students can see what it looks like to draw up 10 units of insulin. They also have to pick the correct syringe – insulin syringes are in units and flu shot syringes are in milliliters – and the correct needle because it's different for intramuscular and subcutaneous injections.

"Another example of this technology is to have that visual first and then have the students practice with real needles, go to the simulation lab and practice on mannequins, and then do a flu shot clinic," said Dr. Culross, assistant professor in the College of Nursing and director of the Learning Resource Center.

Faculty have embraced the iWall technology and appreciate how it connects nursing students in Scottsbluff, Kearney, Lincoln, Omaha and (soon) Norfolk, as well as dental hygiene students in Scottsbluff and Lincoln and College of Allied Health Professions students in Kearney and Omaha.

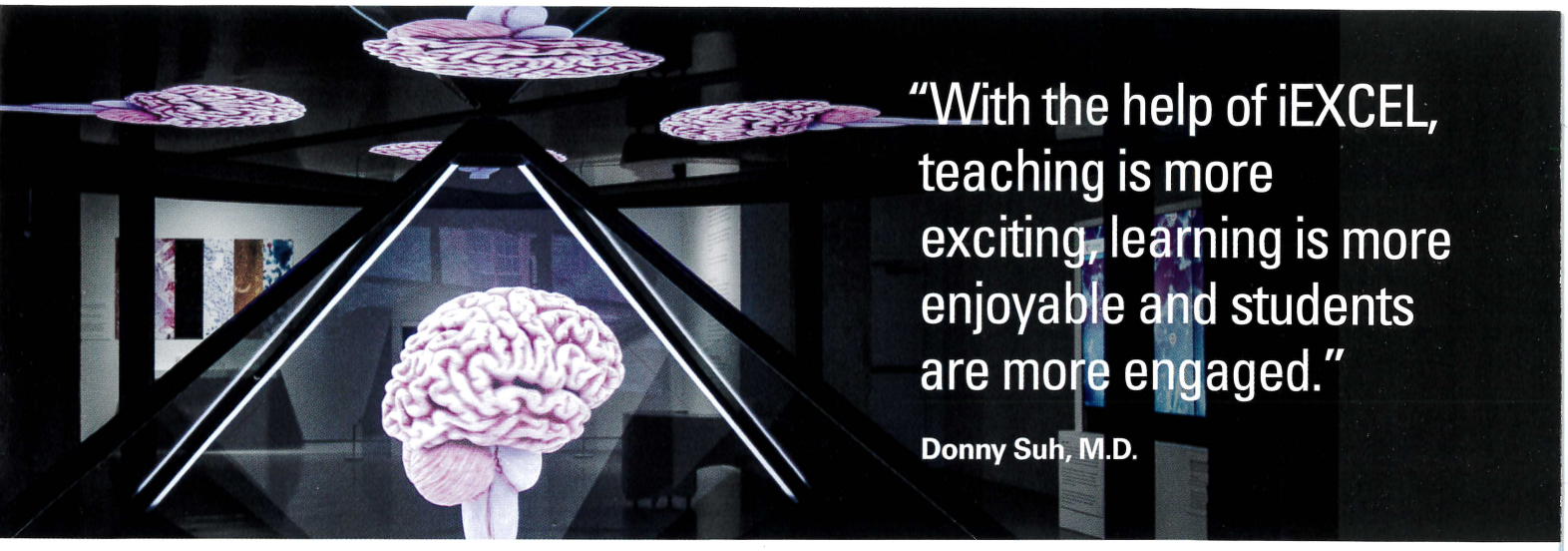
"We're just scratching the surface of what we can do with the technology," Dr. Culcross said. "I'm a kind of gadget girl and this technology provides us with a lot of ways to help students be comfortable with their skills – and confident with the knowledge that before they walk into a live patient room they already have an idea of what they're doing."

Dr. Culross already envisions increased opportunities for interprofessional education collaborations. "If nursing is doing cross-campus projects with injections and medications, we also could involve pharmacy, allied health and medical students. It's exciting to think of what we can create to move forward and really help our students work together."

• As a former UNMC faculty member, Edwin Malashock, M.D., understands the role technology plays in teaching and clinical practice.

"Technology has contributed to the rapid advances in surgical techniques and the actual practice of medicine today," he said. "This was an opportunity to take part in that rapid development by supporting iEXCEL."

Dr. Malashock is referring to the gift that he, and his wife, Sally, made for the construction of the Davis Global Center – and out of respect for his former urology professor and private practice colleague, Dr. Edwin Davis Sr., who serves as the building's namesake.



"With the help of iEXCEL, teaching is more exciting, learning is more enjoyable and students are more engaged."

Donny Suh, M.D.

"He was always seeking ways to improve teaching, surgical techniques and find new drugs to combat urinary infection," Dr. Malashock said.

In fact, Dr. Davis taught him how to perform a critical surgical technique – the perineal prostatectomy – which Dr. Malashock used to treat prostate cancer patients throughout his career.

A clinical professor of surgery at UNMC for 24 years, Dr. Malashock graduated from UNMC's medical school in 1946 alongside Dr. Davis' son, Edwin Davis Jr. In 1953, he joined the senior Dr. Davis in his Omaha medical practice.

• With the use of virtual reality and 3-D virtual animated images, Donny Suh, M.D., plans to better educate health care professionals, high school students and the public on the dangers of shaken baby syndrome.

"They can wear the virtual reality headset and see the damage live as though one is shaking the child. They'll see the retinal hemorrhages and how delicate the babies are as we better educate to prevent shaken baby syndrome."

Dr. Suh, a clinical faculty member in the UNMC Department of Ophthalmology and Visual Sciences, was an early champion of iEXCEL, and has since created a module that enhances his ability to explain how the eyes function. "It's a complex organ, but with the help of iEXCEL, teaching is more exciting, learning is more enjoyable and students are more engaged."

• Dennis Ross, M.D., of Wichita, Kan., and his wife were wowed by their initial visit to the iEXCEL Visualization Hub and Sorrell Clinical Simulation Lab. "Ann and I were so impressed with how advanced the simulation center was," said Dr. Ross, a practicing nephrologist for 40 years.

Such advanced simulation enables students to master procedures using mannequins and virtual reality devices – long before seeing patients, he said. "Instead of watching a doctor do a procedure on a patient, you can do it on the mannequin until you're skilled at it."

The couple – he, a 1973 UNMC College of Medicine graduate from Aurora, Neb., and she, a 1971 UNMC College of Nursing graduate from Wayne, Neb. – have worked with the NU Foundation to monetarily support iEXCEL programming.

The benefits of simulation are many, Dr. Ross said, including a faster learning pace; greater perspective; enhanced engagement and communication between teams, including to rural areas and community hospitals; and improved patient care.

He said he's excited to see iEXCEL blend basic science and clinical work: "When you begin to connect basic science information to clinical outcomes it makes more sense in the learning process."

• Visitors to the Davis Global Center are sure to be awestruck by the high-tech equipment, but Pamela Boyers, Ph.D., associate vice chancellor for iEXCEL, offers a reminder that the technology is simply a tool to enhance health care education. "Disruptive technologies are key to helping transform the way health professionals are prepared for their current and future patient care responsibilities," she said.

Inside the Davis Global Center, one such example will be the "first-in-the-world" five-sided, laser-based, immersive environment. "The iEXCEL Laser CAVE-5 will allow learners to fly through the human body to learn how the heart or lungs look from the inside out," she said. "It also is possible to fully immerse learners in different health care environments, such as an operating room, or even provide care in a virtual village in a third world country. The ability to incorporate unique smells that represent different health care settings also will increase the immersive experience for the learners, making scenarios as close to realistic as possible."

The iEXCEL Holographic Theater will bring holographic professors, subject matter experts and subject-related images to life – and mark another "first" in an academic setting, Dr. Boyers said. "In addition, telepresence allows a live person from across the globe to present and interact with our learners and other audiences. Both opportunities provide the impression of the real presenter actually being in our theater."

Collectively, these tools will augment student learning and improve human performance, she said. "Clinical simulation technologies allow the opportunity to 'practice until perfect' and show great promise for enhancing health care education – as well as offering new and cutting-edge research opportunities."

• Sachin Kedar, M.D., sees patients with abnormal pupils, the dark apertures in the iris of the eye, which allows light to strike the retina. This includes physiologic anisocoria, a benign condition, and Horner's syndrome – an uncommon, but potentially life-threatening condition. Now, student trainees and residents can practice eye exams and become familiar with the common and uncommon conditions of the pupil, using a new virtual reality application – the EyeSim Advanced Pupil Simulator (APS).

In the past, trainees would rely on textbook images, videos or happenstance to master testing and identifying such ophthalmologic dysfunctions. "Now, they can do testing on the computer simulator as many times as they want, as long as they want, and the patient won't complain," Dr. Kedar said. Pupil examination is a basic skill that is practiced by all health care providers – physicians, nurse practitioners, nursing and allied health professionals, such as optometry and EMT. The results of pupil examination depend on the use of correct technique.

An associate professor in the UNMC Department of Neurological Sciences and director of the neurology residency program, Dr. Kedar developed the EyeSim APS – now licensed with EON Reality Inc. and on the market - with Deepta Ghate, M.D., assistant professor, UNMC Department of Ophthalmology and Visual Sciences; A Nu Reality; and UNeMed, the technology transfer and commercialization office for UNMC and UNO.

EyeSim APS simulates how medication and lighting levels affect dysfunctions involving the pupil of the eye. Trainees can add eye drops to the pupil simulation and improve the specificity of their diagnosis and identify serious conditions.

Dr. Kedar has seen the benefits of virtual reality amongst trainees: enhanced understanding of the concepts, increased retention of knowledge, improved confidence prior to seeing actual patients.

"I never had access to such technology in training," he said. "The first time I encountered a patient was a frightful experience. Now, students and residents come to clinic and are comfortable doing the examination and know all the steps without being afraid."

• UNMC student Charlotte Starling values hands-on learning, whether it's in the gross anatomy lab or collaborating on the iWall. Each, she says, benefits visual learners, such as herself.

The Los Angeles native, who is pursuing a master's in medical anatomy in the Graduate College at UNMC, said it's invaluable to "experience what we might experience in the real world before we actually do."

And, for that reason, her stint as a volunteer emergency medical technician during her undergraduate years at Loyola Marymount University was an ideal precursor to the master's program. "As a participant, you get that preview aspect, which shadowing can't provide when you're simply an observer. The experience validated my desire to pursue medicine."

AR/VR tools, she said, will "give us the opportunity to preview something before we go and do it."

It's what science fiction has done for years.

PROBIOTICS PROTECT NEWBORNS FROM DEADLY INFECTION

by Elizabeth Kumru

Dr. Pinaki Panigrahi tested many probiotics to find one that protects newborns from sepsis.

Pinaki Panigrahi, M.D., Ph.D., may be the most wanted man in the world. Ever since last year, when he discovered and proved that a certain strain of probiotic prevents sepsis in newborns, a life-threatening bloodstream infection, his phone has been ringing off the hook and his inbox has been flooded with emails.

The story of his breakthrough research spread like wildfire and was noticed around the world including many in developing nations who wish to improve their infant mortality rate.

Dr. Panigrahi has been a highly sought-out keynote speaker and has presented at dozens of national and international meetings – from a late-breaking talk at the American Pediatric Society and a "21st Century Milestones in Infectious Diseases" plenary at the annual European Society for Pediatric Infectious Diseases meeting, to joint workshops convened by the U.S. Food and Drug Administration, National Institutes of Health, the World Sepsis Congress and many in between.

His paper in the journal *Nature* was covered by the New York Times, NPR and major newspapers around the world, and was cited more than 1,000 times. He was presented the Lifetime Achievement Award by the Probiotic Association of India and is now collaborating with researchers in the U.S., Canada, India, Papua New Guinea and Ghana.

In the developing world, sepsis accounts for 30 percent of all neonatal lives lost per year and is a major cause of morbidity, extended hospital stay and mortality in western neonatal nurseries.

Developed over a 15-year period, Dr. Panigrahi's product contained a strain of Lactobacillus plantarum that was chosen for its ability to attach to gut cells. His team added a sugar to nourish the microbe and give it a foothold when it enters a baby's gut. This combination, called a synbiotic, is strikingly effective.

Results of the study showed that sepsis and deaths in the first two months of infancy were reduced by 40 percent, more than twice the anticipated reduction, at a cost of only $1 per infant. The synbiotic treatment also surprisingly lowered respiratory tract infections.

Now, Dr. Panigrahi is working with many professors around the world, including the director of the Institute of Microbial Technology, an Indian federal government center of excellence, to secure funding and build a network of physicians to conduct trials in different parts of the world.

40%

Reduction in sepsis and deaths in first two months of infancy

"The mother's flora, and its environment dictates what bacteria the baby will acquire. Diet affects the mother's flora and her breast milk. Testing in different regions is key because one probiotic may not fit all. It is essential that we find the right strain, for specific conditions, in specific populations," Dr. Panigrahi said.

RESEARCHERS TURN ENTREPRENEURS

by Kalani Simpson

Surinder Batra, Ph.D., chair of biochemistry and molecular biology, held out his hand, gesturing toward a research lab in the Durham Research Center. It looked like most every other research lab in UNMC's DRC towers. But this DRC research lab is different.

"This is the company," Dr. Batra said.

This is Sanguine Diagnostics and Therapeutics (SDT), Inc. It is a company founded by UNMC faculty, housed on the UNMC campus (it leases the DRC lab space) and working toward – as the name implies – diagnostics and therapeutics for pancreatic cancer and other cancers.

The enterprise emerged from discoveries made by UNMC scientists with a goal to impact clinical practice – as a company and not a purely academic endeavor.

"Instead of publishing a paper they produce a specific product," said Joe Runge, J.D., senior licensing specialist at UNeMed, UNMC's technology transfer arm.

Ideally, the product, or products, would eventually reach patients and improve lives. This model "gives a researcher permission to stay focused on that one discovery and develop it further," Dr. Runge said.

This is increasingly how scientific discoveries move forward now. Research is translated from the lab bench to the populace – not just when academia partners with industry, but when academics become industry.

SDT was formed in 2009 when its CEO and legal counsel Brian Brislen, J.D., teamed up with UNMC faculty and staff Amy Dodson, Dr. Batra, Tony Hollingsworth, Ph.D., and Aaron Sasson, M.D. The company was founded with a vision to translate the emerging knowledge from mucin research into

Principal investigators Drs. Sukhwinder Kaur, far left, and Maneesh Jain, far right, consult with Matt Hansen, Nicole Japp and SDT chief scientific officer Dr. Wade Junker.

clinical products to improve diagnosis and therapy of patients with pancreatic and other malignancies.

Dr. Sasson has since taken a position as chief of surgical oncology at Stony Brook Cancer Center, but remains an integral part of SDT and continues to collaborate with UNMC researchers.

UNMC houses a robust program in pancreatic cancer research, which is nationally recognized for its excellence and supported by several large federal grants, including Specialized Programs of Research Excellence and program project grants. Drs. Batra and Hollingsworth, and other UNMC investigators, have studied pancreatic cancer for decades and through their research have developed several models, reagents and resources that are central for developing and testing diagnostic and therapeutic agents.

Industry helps faculty move discoveries forward, in part, because businesses are eligible to seek an alternative revenue stream of funding from federal agencies and investors. The National Institutes of Health (NIH) has traditionally awarded grants for basic-science hypotheses, and that is how academic scientists did their work.

However, the NIH also supports product development and sets aside Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants for which small businesses like SDT are eligible to compete for funding. Similarly, the state of Nebraska has several programs to provide logistic and financial support to small businesses emerging from academic institutions.

> "Such challenging endeavors require vision, perseverance, hard work and above all, a team approach."
>
> **Surinder Batra, Ph.D.**

Few in the state of Nebraska have taken advantage of these opportunities. But, in forming their own company, Dr. Batra and his colleagues have been successful in pursuing these new avenues for their research and funding.

Wade Junker, Ph.D., Dr. Batra's former graduate student, is SDT's chief scientific officer. He works with UNMC researchers Maneesh Jain, Ph.D., and Sukhwinder Kaur, Ph.D., who are co-principal investigators on respective pancreatic cancer projects with SDT that have been awarded a total of $4 million in SBIR "Fast-track" grants.

That's a lot of money SDT brings into the state economy.

The two grants are working toward two different products – which the team believes can then be adapted to multiple cancers.

Dr. Kaur's project is titled "Seromic mucin signature for the early diagnosis of pancreatic cancer." Dr. Jain heads a study of "MUC4/16 assay for the early diagnosis and management of benign and malignant pancreatic diseases."

While different, these projects both hinge on the discoveries made by UNMC on the role mucins play in pancreatic and other cancers. By virtue of their differential expression and functional role in disease pathobiology, mucins are promising biomarkers for early detection or prognostication, and attractive targets for therapeutic intervention.

"This is titled an integrated, large-scale program with a unified vision of translating laboratory observations into clinical practice," Dr. Jain said. "I don't think anybody is working on mucins on this scale."

"Such challenging endeavors require vision, perseverance, hard work and above all, a team approach," Dr. Batra said. "These products are a fruition of more than 20 years of work in which several researchers made significant contributions."

The team hopes it is just a few years away from FDA approval, commercialization, and making a difference in the lives of patients who need every tool in the fight against one of the world's deadliest cancers.

MORE THAN PIPE DREAMS

UNMC's educational pipeline programs are meant to prepare and inspire. They also bring more underrepresented and rural students into biomedical research and the health professions, and encourage a return to their communities. For some participants, coming here has meant exploring the world beyond the borders of their ancestral home for the first time. For others, it has led to a once-in-a-lifetime opportunity to explore the world of biodefense research at USAMRID at Fort Detrick in Frederick, Md. And, for many others, it has solidified their passion and pursuit of a health professions career. Meet a few of these students, and learn why they love their respective programs.

by Lisa Spellman & Kalani Simpson

UHOP: Alexis Simpson

Sophomore at the University of Nebraska at Omaha majoring in neuroscience with a minor in chemistry.
Hometown: Omaha, Neb.
I want to become a pediatrician.

UHOP (Urban Health Opportunities Program) is a partnership with UNMC and the University of Nebraska at Omaha aimed at diversifying the urban Nebraska primary care medical workforce by identifying and preparing qualified students from underrepresented groups to enter and succeed in medical school.

54%
of physicians in Nebraska are UNMC graduates

"When I was in the third grade, I was treated by a phenomenal health care team for a major burn. It was then I decided to become a pediatrician. Now, I see myself as a role model for young people in my community. My goal as a physician is to inspire, comfort, educate and serve the families in my community through the practice of medicine. I can't wait to be like the people who saved me, and save people like me."

"I joined the INBRE program because its biomedical research program would expose me to medicine and give me a chance to work in a hospital. But, I've also enjoyed the research aspect and am now considering the M.D.-Ph.D. program.

"This summer I worked at Boys Town National Research Hospital in an audiology lab that is developing tests to detect hidden hearing loss, or loss people experience when in a noisy setting and cannot hear as clearly as they once used to. It's been a great experience."

INBRE: Michael Merical

Junior at Nebraska Wesleyan University majoring in biology.
Hometown: Omaha, Neb.
I want to become an emergency room physician or trauma surgeon.

A $16.2 million grant from the National Institute of General Medical Sciences of the National Institutes of Health supports the **INBRE (Institutional Development Award Program Networks of Biomedical Research Excellence)** program in Nebraska. The program creates a biomedical research infrastructure that provides research opportunities for undergraduate students and serves as a pipeline for those students to continue into graduate research.

"This program showed me how to celebrate my successes; network with other minorities and disadvantaged students, who also are interested in the health professions; and provided me with shadowing experiences.

I already was thinking of pursuing a medical degree, but SHPEP exposed me to public health and now I am considering pursuing dual degrees. My passion is to become a doctor who travels and helps other disadvantaged communities around the world."

SHPEP: Tyrique Richardson

Sophomore at Earlham College in Richmond, Ind., majoring in biochemistry.
Hometown: Brooklyn, N.Y.
I want to become a pediatric surgeon.

SHPEP (Summer Health Professions Education Program) is a free summer enrichment program focused on improving access to information and resources for college students interested in the health professions. The goal is to strengthen the academic proficiency and career development of students underrepresented in the health professions and prepare them for a successful application and matriculation to health professions schools. UNMC is one of 13 universities across the nation that offers this program.

SEPA: Audrey Bavari

Senior at Omaha Burke High School dually enrolled at the University of Nebraska at Omaha.
Hometown: Omaha, Neb.
Tribal affiliation: Oglala Sioux
I want to become a neurosurgeon.

SEPA (Science Education Partnership Award) is funded by a grant from the National Institutes of Health and aimed at enriching health science education in Native American communities in Nebraska and South Dakota. It is a partnership between UNMC's Munroe-Meyer Institute, the Great Plains Area Tribal Chairmen's Health Board and K-12 schools in Nebraska and South Dakota.

KHOP: Andrew Flint

Pursuing a doctor of pharmacy at UNMC; graduate of the University of Nebraska at Kearney with a degree in applied health science.
Hometown: Broken Bow, Neb.
I want to become a clinical pharmacist in a hospital in a rural Nebraska community.

In partnership with the University of Nebraska at Kearney, **KHOP (Kearney Health Opportunities Program)** is designed to recruit and educate students from rural Nebraska who are committed to returning to rural Nebraska to practice health care.

"Every year, KHOP students volunteer with the Red Cross and host an annual blood drive. The support and outreach from the rural community is impressive and showcases just how much of an impact KHOP has. Working as a team helped prepare me for the interdisciplinary style of health care that we now practice at UNMC. I am thankful for the experiences that KHOP provided and I look forward to returning to a rural community to practice pharmacy."

63%

of pharmacists working in rural Nebraska communities are UNMC graduates

"SEPA allowed my passion for medicine to grow even further. My goal includes specializing in pediatrics along with research that will enhance my clinical practice. This summer, I conducted research in Dr. Joyce Solheim's cancer lab as part of the YES! (Youth Enjoy Science) program. I developed critical thinking skills that I've used to answer the how's and why's of the functions, motives and structures within pancreatic cancer cells."

High School Alliance: **Tyler Housh**

Pursuing a bachelor's degree in medical laboratory science at UNMC's College of Allied Health Professions; graduate of Wayne State College, RHOP program.
Hometown: Bennington, Neb.
I want to become a medical lab scientist at a hospital in a rural community.

The High School Alliance is a health sciences enrichment program that partners UNMC and public school districts in the greater Omaha area. The program provides high school juniors and seniors with the opportunity to observe, shadow and work alongside health care professionals and researchers at UNMC.

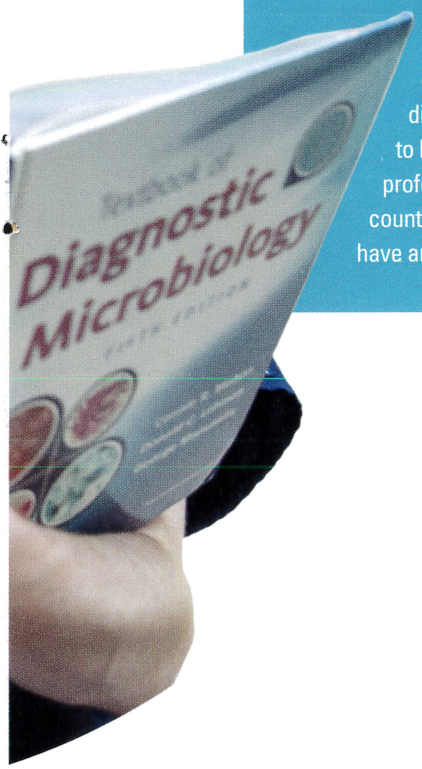
"The PHEAST program allowed me to finish my senior year of undergrad with less stress and worry knowing I had a spot in the MPH program after graduation. I also had the opportunity to meet students and faculty at UNMC prior to becoming a student here."

PHEAST: **Lindsey Cork**

Received a master's degree in public health at UNMC in August; graduated from the University of Nebraska at Kearney with a degree in exercise science.
Hometown: Bellevue, Neb.
I want to study chronic disease prevention and management.

PHEAST (Public Health Early Admissions Student Track) is designed to recruit, educate and graduate passionate public health leaders committed to improving population health outcomes in Nebraska. The PHEAST program is a collaborative initiative between the UNMC College of Public Health, UNK and the Nebraska State College System, which includes Chadron State, Peru State and Wayne State colleges.

"In February of 2014, I became very sick and was hospitalized for nearly a week. During that time, an infectious disease physician diagnosed my mystery illness as a systemic Fusobacterium infection. I admired the way he solved my case, fitting puzzle pieces together in order to reach a diagnosis. I decided then to be an infectious disease physician. But in the High School Alliance, I quickly came to love medical laboratory science, which is now my passion. This profession offers so many options. I also have been exposed to countless individuals, adults and fellow classmates, who will forever have an impact on my life and who I will never forget."



52%

of physical therapists working in rural Nebraska communities are UNMC graduates

RHOP: **Leah Uhlir**

Pursuing a Ph.D. in physical therapy at UNMC; graduate of Chadron State College with a degree in human biology.
Hometown: Sidney, Neb.
I want to practice physical therapy in rural Nebraska.

RHOP (Rural Health Opportunities Program) is designed to address the special needs of rural Nebraska by encouraging rural residents to pursue a career in the health care fields. Students selected are guaranteed admission to UNMC as long as all stated requirements are met and the pre-professional studies at Chadron State College, Wayne State College and Peru State College are completed.

"The RHOP program provided me many opportunities. While my spot in the College of Allied Health Professions was guaranteed, I still had to make the grades. I toured UNMC's Omaha campus as a sophomore and senior in college, interacted with past RHOP students in physical therapy school, and had the chance to discover why UNMC was the right school for me. I am excited to return to a rural setting to practice and RHOP made this goal more attainable for me."

'A BIG HOME RUN FOR PATIENTS'

NEW CANCER TREATMENT MADE POSSIBLE BY CLINICAL RESEARCH TRIALS

by Tom O'Connor

Nick Howe is cancer free thanks to the CAR T treatment for his lymphoma that was suggested by his physician, Dr. Philip Bierman.

"First, we didn't know if we'd be able to have children. And until recently, I didn't even know if I'd still be here today."

Nick Howe

Breakthroughs in cancer treatments don't come easy.

But, they do happen – thanks to the combined efforts of researchers and clinicians in inventing new treatments and – even more importantly – to the willingness of patients to participate in clinical research trials to test these ideas and see if they work.

"Clinical trials are important, especially when it comes to cancer. That's the way we discover new treatments," said Julie Vose, M.D., the Neumann M. and Mildred E. Harris Professor and the chief of hematology/oncology at UNMC.

"Everything we have today is because patients participated in clinical trials. Without patients on clinical trials, we wouldn't have any cancer treatments today or tomorrow."

One of the biggest cancer breakthroughs in recent times has been the success of chimeric antigen receptor (CAR T-cell therapy) with certain types of B-cell lymphoma and B-cell acute lymphoblastic leukemia.

The process takes the patient's own T cells – the white blood cells that help our bodies fight infection and cancer – outside the body and stimulates them so they can fight their own lymphoma.

UNMC/Nebraska Medicine was one of the first health networks in the Midwest and the only one in Nebraska to offer CAR T-cell therapy.

With CAR T-cell therapy, lymphoma patients who have failed every other treatment option are seeing a complete remission rate of nearly 50 percent after six months.

"It has been a big home run," Dr. Vose said.

Nick Howe of Omaha was diagnosed with lymphoma at age 31.

"When I saw the CAT scan, I couldn't believe it," Howe said. "The cancer was everywhere. It looked like I had run through a field of lymphoma."

After going through chemotherapy, immunotherapy and an autologous stem cell transplant, Howe still had traces of cancer in his system. He was running out of options.

His physician, Philip Bierman, M.D., professor of oncology/hematology for UNMC/Nebraska Medicine, suggested that he should try CAR T-cell therapy. Howe completed the therapy last November, and remembers the first call he received from Dr. Bierman several weeks later.

"He was ecstatic," Howe said, "He said, 'Your scan looks phenomenal. There is no sign of cancer.'"

Today, Howe is cancer free and hopeful for the future. He and his wife, Rachel, have a new addition to their family – a new baby girl named Julia.

"This is such an emotional time," he said. "First, we didn't know if we'd be able to have children. And until recently, I didn't even know if I'd still be here today. I'm so excited to be a new father and to experience this stage of my life with Rachel. I have Dr. Bierman and his staff to thank. I trusted him wholeheartedly throughout this whole process."

Dr. Vose said UNMC/Nebraska Medicine has treated 50 patients with CAR T-cell therapy. Thanks to the successful clinical trials, the Food and Drug Administration approved two CAR T-cell therapies for use in patients – one in November 2017 and the other in April 2018.

MONITORING POPULATION HEALTH IN A REFUGEE CAMP

by Elizabeth Kumru

Ali S. Khan, M.D., M.P.H., has spent his life fighting infectious diseases around the world.

So, it was no surprise when the World Health Organization (WHO) asked him to set up an early warning system more than 8,000 miles away from his UNMC office – in the Rohingya refugee camp at Cox's Bazar, Bangladesh.

"My whole life has been about prevention," said Dr. Khan, dean of the UNMC College of Public Health. "How do you prevent disease? How do you prevent death? How do you not help somebody, especially when you have the ability to do it – especially when it is genocide?"

Genocide – the worst of all human atrocities – has forced more than one million Rohingya to flee their home in Myanmar since 2017. Most are in refugee camps in Bangladesh where overcrowded conditions have caused several disease outbreaks. To make matters worse, more than 60 percent of the available water supply in the camps is contaminated, increasing the risk of spreading communicable and water-borne diseases.

In January 2018, Dr. Khan led a team of volunteers – from international health care and relief agencies, as well as the host government – in addressing a diphtheria outbreak. During that deployment, his team established an early warning and alert reporting system and provided diphtheria monitoring in health facilities and communities.

The team established a common electronic platform called the Early Warning, Alert and Response System (EWARS) to collectively track and monitor diseases and lab analysis work.

"As head of the health group's health management information systems, we had to worry about other diseases such as measles and cholera. We had to take care of the diphtheria outbreak, but that didn't mean we could be blind to a measles outbreak. We needed a full public health infrastructure system for the community," he said.

Ten to 15 people worked directly for him, and more than 100 people and 10 key partners worked with his team in the diphtheria treatment centers. Numerous other partners, who had clinics or did community outreach, also were part of the tracking system.

"It was a lot to keep track of and I was working 14-16 hour days, seven days a week. I would try to give people a day off, but there are lots of uncertainties. You never know what the next day will bring. You have to be prepared for shifts in the outbreak and also build relationships with people you've never met, but who need to come together to solve problems."

Turnover is a challenge, he said. "Some people come for six-to-eight weeks and then rotate out, so there's this constant flux of people and, still, you're trying to drive the mission forward while dealing with external factors of the outbreak and the politics."

On top of all that, many diseases share the same symptoms. Diphtheria can look like strep – both present with a sore throat and fever. For years, physicians thought the presence of a large white membrane in the back of the throat was a clear sign of diphtheria, but that was disproven.

"Fast thinking on one's feet is required as you don't always have available rapid or point-of-care diagnostics. You think about the clinical symptoms available to you, the epidemiology and then triage patients. And, you hope to get a lab diagnosis quickly so you're not putting people who are confirmed with the disease in with people who don't have it."

"It's exhausting," he said, "but also invigorating, challenging and extremely satisfying because you're saving lives and having an impact on communities."

Global response

UNMC is a member of the Global Outbreak Alert and Response Network (GOARN), a source of expert consultants for United Nations agencies. "This means we respond to global emergency alerts," said Ali S. Khan, M.D., M.P.H., dean of the College of Public Health.

"They know who I am and also know about UNMC. When they send out requests, we look at our faculty across the campus and suggest who would be good to deploy."

Since joining UNMC, Dr. Khan twice was deployed by GOARN to Sierra Leone in 2015 to help eradicate the Ebola virus in that country. Before joining UNMC, he spent part of his 23 years at the Centers for Disease Control and Prevention as a field epidemiologist, or disease detective. His travels took him to remote villages all over the world, to war zones and to ground zero types of places where treatment does not exist for such deadly viruses as Ebola, SARS and the Congo-Crimean hemorrhagic fever.

Dr. Khan has been UNMC's lone respondent to GOARN, but he envisions forming interprofessional teams that can respond to global outbreaks. "I'd like to see our engagement a lot broader than it currently is and expand our research activities during outbreaks." He now serves on the GOARN steering committee, representing UNMC as one of 20 global institutions responsible for the implementation and evaluation of all global responses for the next four years.

Senior nursing student Jenna Paloucek is excited about the new UNMC College of Nursing building on the Lincoln campus.

by Colleen Fleischer

NEW NURSING BUILDING EXCITES STUDENT

Jenna Paloucek loved growing up in Ogallala, a town in western Nebraska. She plans to return there someday to do what she also loves – provide first-rate health care to women.

"There are limited choices for women's health care where I grew up," said Paloucek, a student in the UNMC College of Nursing Lincoln Division. "You have to travel about an hour to see someone specializing in women's health. So I would love to be able to provide that for my hometown and surrounding small towns."

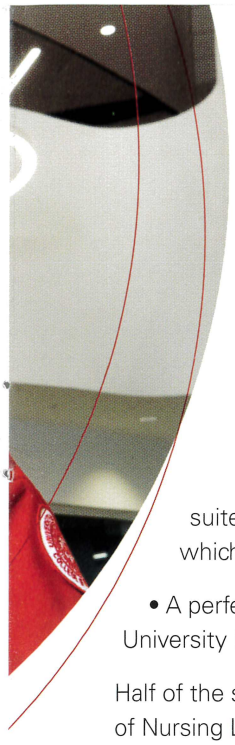
She said the college's new state-of-the-art building, which opened this past July on the Lincoln campus, will enable her to help that underserved population while making "a positive impact on nursing all over Nebraska."

"This building is such a blessing to me and other nursing students," Paloucek said. "I take a lot of pride in knowing that I am in the UNMC nursing program, so this building makes me feel even more excited and honored to be here. I also know that this new building will help deepen our knowledge and prepare us even more for when we are out in communities as nurses."

The new building, located at 550 N. 19th St. in downtown Lincoln, provides:

- World-class, technology-enriched learning spaces that immerse students in real-world scenarios. Simulation laboratories, including an operating room, neonatal intensive care and other realistic health care settings, feature high-fidelity mannequins to create real-life patient care situations for instructing students. A control center is used by instructors to manipulate the care requirements of each simulation room.

- A bigger space that gives the college space for future program growth in learning and research. Its new research



"This building is such a blessing to me and other nursing students."

Jenna Paloucek

suite can house up to four major research projects, which is more space than in the past.

• A perfect opportunity for enhanced collaboration with the University Health Center, also housed in the new building.

Half of the space in the new building belongs to the College of Nursing Lincoln Division, the other half to the University of Nebraska-Lincoln Health Center. Nebraska Medicine, UNMC's primary clinical partner, operates the UHC clinic and employs its physicians, nurse practitioners and other staff. The clinic has 26 examination rooms with space for triage, procedures, casting and other services. The clinic also includes a wellness kitchen to promote healthy nutrition; dental, optometry, radiology and laboratory services; and an area dedicated to helping students manage stress and anxiety.

Juliann Sebastian, Ph.D., dean of the College of Nursing, said faculty and students are thrilled about collaborating with UNL's Health Center.

"We see that as going a long way toward creating efficiencies by being together in the same building. But, we can actually do some things differently like students now have opportunities to participate in health promotion and outreach activities with the UHC.

"This is part of a major focus in health care these days – embedding academic learning in the real clinical and community environment."

The College of Nursing is conducting research that's related to rural health, Dr. Sebastian said. Much of the college's faculty research relates to the needs of rural populations, such as cardiovascular issues, care of people managing cancer diagnoses and prevention of osteoporosis.

All of UNMC's nursing students work with a variety of patients, some referred from rural areas so understanding rural culture and the needs of rural families is important, she said.

"Our faculty is quite tuned-in to the needs of rural populations, and because we now have more space for research, hopefully we'll have more research programs that address rural health care needs," Dr. Sebastian said. "Some of our students will return home to work in rural areas, and we're very proud of that.

"We encourage the students to give back to their home communities, and we're grateful we are able to admit students around the state and beyond, as they bring a whole variety of new perspectives on health care and what nursing care should look like in the future."

The College of Nursing portion of the building was paid by state funds and private contributions. Brian Hastings, president and chief executive officer of the University of Nebraska Foundation, said the university is grateful for the people and organizations who contributed to the new complex. These major contributors include:

• UNL alumni Ruth and Bill Scott of Omaha, who provided a lead challenge gift;

• UNL alumnus Del Lienemann Sr., of Lincoln, with the Lienemann Charitable Foundation and Ethel S. Abbott Charitable Foundation, in memory of Charlotte Peck Lienemann, a College of Nursing alumna;

• The family of Phyllis and Duane Acklie, a University of Nebraska–Lincoln alumnus;

• UNMC College of Nursing alumna Dr. Teresa Anderson and Dr. Dennis Anderson of Omaha;

• Assurity Life Insurance Co.;

• The estate of Sharon K. Holmberg, a UNMC College of Nursing alumna;

• UNMC College of Medicine alumnus Dr. David Schmidt and Marla Schmidt of Lincoln;

• UNMC College of Nursing alumna Barbara Sand of Lincoln, in memory of her uncle, the late Dr. Harold Daum, a UNMC College of Medicine alumnus.

Paloucek, who will graduate next May and hopes to enroll in UNMC's doctor of nursing practice program, said she'd love to thank those donors for their generosity.

"This new building," she said, "would not be possible without their help."

Edward Jenner

Marie Curie

Florence Nightingale

Joseph Lister

Alexander Fleming

[YOUR NAME HERE]

Leave a lasting legacy on the future of human health with a planned gift to the University of Nebraska Medical Center. By considering UNMC in your estate planning, your generosity will span generations to come, which means you'll help provide the best care possible for patients throughout this century and beyond.

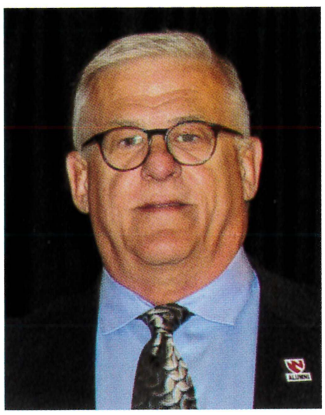
To find out how to include UNMC in your legacy, visit us online at nufoundation.org/giftplanning. Or you may email gift.planning@nufoundation.org or call a gift planning officer at the University of Nebraska Foundation at 800-432-3216.

UNMC

University of Nebraska FOUNDATION

alumni news

Kyle Meyer, Ph.D.



John Lohrberg, Ph.D.

UNMC Alumni Association elects officers

In May, the UNMC Alumni Association board of directors elected new leadership including Kyle Meyer, PhD, PT '79, '85 as president and John Lohrberg, MD '86 as vice president. The new officers' term runs from July 1, 2018, to June 30, 2020. The UNMC Alumni Association board of directors is the governing body of UNMC's alumni organization, which is made up of seven college-based alumni councils. The new officers succeed Chancellor Jeffrey P. Gold, MD, as president and Bill Lydiatt, MD '88 as vice president. A full listing of the UNMC Alumni Association board of directors is listed on the inside cover of this magazine.

UNMC Alumni Association hosts all-board retreat

Volunteers from each of the UNMC Alumni Association's councils gathered for the organization's annual strategic planning retreat with the theme "Best Practices in Alumni Engagement." This year's retreat featured keynote speaker Chad Ruback, vice president for Institutional Advancement for the Rosalind Franklin University of Medicine and Science in Chicago. Ruback led the group in a discussion about national best practices in alumni engagement. In addition to learning about best practices, UNMC Chancellor Jeffrey P. Gold, MD, welcomed the group to the event hosted at the Carol Joy Holling Center in Ashland, Neb. The attendees also participated in interprofessional small group work discussing ideas for the year ahead.

Pictured L to R: Geoff Thiele, PhD '85; Samantha Minnick, DPT '08; Alicia Shiller, PhD '15; Kyle Meyer, PhD, PT '79, '85; Dennis Strauss, MD'68; and Tanya Custer, MITS '95.

Alumni Gather for Tailgate, Baseball at 8th Annual Showdown in O-Town

Alumni enjoyed the eighth annual Showdown in O-Town this year at TD Ameritrade Park in Omaha. The always exciting Nebraska vs. Creighton baseball game took place on May 8. Alumni and friends from seven UNMC colleges attended the event, with a tailgate picnic dinner at the Diamond Room, home to the NCAA Men's College World Series' "Baseball Village." Guests enjoyed catching up with friends, a cook-out dinner and seats at TD Ameritrade Park directly behind home plate. Creighton defeated Nebraska this year in a 5-4 game.

Pictured above, L to R: medical nutrition alumni from the Class of 2017 Laura Cordwin, Rebecca Kraay and Leslie Evans.

Coming Soon: UNMC Alumni Association Connections Project

UNMC alumni possess a vast array of knowledge and abilities that have the potential to serve as a treasure trove of information for current students. To help mine the knowledge of alumni, the Alumni Association is developing the Connections project, which is a blog with a series of video and written posts that will be made available to current students via social media channels. Topics will include well-being, professional skills, personal finance and time, talent and treasure, among many others. Alumni will be tapped to compile the content and the Alumni Relations Office will edit and publish the content. The content is in development with the plan to launch on the site in early 2019. Interested alumni may reach out to Kat Hamilton at kat.hamilton@unmc.edu to learn more about how to participate.

Join the UNMC Alumni Association for exciting travel opportunities

Masterpiece Montage
10-night luxury cruise aboard Sirena
Cruises Rome to Barcelona
Sept. 30 – Oct. 11, 2019

Cuba Charms
10-night luxury cruise aboard Insignia
Cruises Miami to Miami
Oct. 29-Nov. 9, 2019

The UNMC Alumni Association has partnered with industry-leading travel organization GoNext to offer two travel cruise adventures in 2019. Both trips have special rates available for UNMC alumni who travel as part of the program. For more information, visit www.unmc.edu/alumni. Additional trips will be offered in 2020.

2018 awards for meritorious service

The UNMC Alumni Association and its councils recognize alumni and honorary alumni for their meritorious service through its awards program. Award recipients for 2018 include:

College of Medicine

Distinguished Alumnus Award
Dennis Ross, MD
Class of 1973

Dedication to Student Excellence Award
Joseph Anderson, MD
Class of 1968

Early Career Achievement Award
Sasha Shillcutt, MD
Class of 2003

Honorary Alumnus Award
Lynell Klassen, MD

College of Nursing

Distinguished Alumnus Award
Janice Twiss, PhD, APRN-NP, WHNP-BC
BSN 1965, MSN 1979

Nursing Excellence Award
Dieu-My Tran, PhD, RN, CNE
BSN 2010 - Lincoln, PhD 2014

Nursing Excellence Award
Carissa Lueck, RN, BSN, DNP 2018

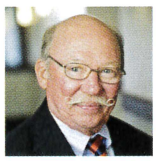
Honorary Alumnus Award
Jill Thewke, MPA

Dorothy Patach Spirit of Service Award
Kelley Hasenauer, DNP, APRN
MSN 2001

Heritage Award
Audrey E. Nelson, PhD, RN
BSN 1972

Graduate Studies Program

Distinguished Alumnus Award
Victoria Roche, PhD
PhD 1981



Honorary Alumnus Award
James Turpen, PhD

College of Public Health

Distinguished Alumnus Award
Erin Carlson, DrPH, MPH
Class of 2004

Early Career Achievement Award
Salomon Compaore, MD, MPH
Class of 2014

College of Dentistry

Alumni Achievement Award
Chris Nix, DDS
Class of 1978

Distinguished Service Award
Wayne Kaldahl, DDS
Class of 1968

Honorary Life Membership Award
David Shaw, PhD

Outstanding Educator Award
William Johnson, DDS, MS

Follow the UNMC Alumni Association via Social Media

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UNMC Alumni group

Learn more about the University of Nebraska Advocates Program

The University of Nebraska Advocates program is a coalition of individuals who are passionate about their university, informed about the issues impacting higher education, and prepared to raise awareness of the university's contributions to the state of Nebraska and beyond. If you'd like to learn more or sign up to participate, visit **https://nebraska.edu/advocates.**

Allied Health Professions

Dianne Bahn MITS'70, MLS'71
Yankton, S.D., retired as lead technologist from the South Dakota Human Services Center in January 2018 after more than 41 years of service.

Tammy Webster MITS'00
Gretna, Neb., graduated with her PhD from UNMC in May 2018.

Karin Bellows MITS'10
Council Bluffs, Iowa, assumed the position of clinical coordinator at Nebraska Methodist College in Omaha in the fall of 2017.

Shelly Zimbelman MITS'10
Fenton, Mo., has worked as a department head in the post-secondary sector, completed a master's degree in instructional design, held employment at the director-level overseeing online and traditional course development and operations, and is now self-employed, operating her own consulting company and artist business.

Asa McDonald MITS'17
Seattle, Wash., applied for a supervisor position at work, just one month after graduating, and was accepted into the role. He is excited for this first step toward his dream of becoming a director of radiology.

Patrick Miyahara MLS'79
Gering, Neb., has been a medical technologist for 32 years at Regional West Medical Center in Scottsbluff, Neb., and seven years at Banner Health-Torrington Community Hospital in Torrington, Wyo. He and his wife Sherry have been married 30 years and have one daughter and two grandchildren.

Karen Honeycutt MLS'84
Omaha, Neb., was named UNMC's 2017 Varner Educator Laureate in December 2017. This recognizes an individual with sustained achievement in education who has significantly improved the UNMC learning environment through the provision of outstanding educational experiences.

Linsey Donner MLS'04, '11
Omaha, Neb., assistant professor and microbiology coordinator in UNMC's Medical Laboratory Science program, received the Shirley Noble Award at the 2018 Nebraska Laboratory Spring Meeting. This award recognizes an American Society for Clinical Laboratory Science-Nebraska member who actively promotes the laboratory profession.

Reuben Dennis Rieke PA'03, '05
Gretna, Neb., was selected to assume command of the 110th Multifunctional Medical Battalion in the Nebraska Army National Guard.

Tom Freeman PA'06
Beaufort, S.C., joined the team of Lowcountry Spine and Sport in May. Previously, he served for 10 years as a surgical technician in the U.S. Army. He and his wife, Christine, have five children.

Amy Hecker PA'08
Fargo, N.D., joined Sanford Health in April. She specializes in orthopedic surgery and practices at the Sanford Orthopedics and Sports Medicine Clinic in Fargo.

Ashley Chrisman PA'10
Niwot, Colo., works at the University of Colorado/CU Sports Medicine in Orthopedic Sports Medicine in Boulder, Colo.

Michelle DeMattia PA'10
Clarksville, Md., has practiced at Annapolis Dermatology Center since 2015. She and her husband have two children.

Alysha McLean PA'17
Central City, Neb., joined the Merrick Medical Center in April. She will see patients in the Central City and Fullerton clinics, as well as take rotations in the MMC emergency room.

Kayla Rankin PA'17
Kearney, Neb., joined Kearney Family Practice Associates in April.

Patricia Hageman PT'79, PhD'94
Ithaca, Neb., alongside **Elizabeth Wellsandt PT'09** and Michael Yoerger collaborated to examine 30-month weight loss and weight maintenance outcomes of women with obesity and physician-diagnosed arthritis. This team was the recipient of the Cardiovascular and Pulmonary Section Best Poster Award for their presentation at the February Combined Sections Meeting of the American Physical Therapy Association. The award recognizes achievement for clinical relevancy, research design and presentation.

Patricia Hageman and Elizabeth Wellsandt.

Kimberly Marlatt PT'84
Wood Lake, Neb., retired from her physical therapy practice in July 2017 and from her role as part-time clinical coordinator at UNMC in March. She now does occasional fill-in work at Gordon Memorial Hospital and Cherry County Hospital and she and her husband, Tim, own and operate TK Angus.

Debra Phinney PT'88
Grand Island, Neb., serves as the director of physical therapy at Children's Rehab Center in Grand Island. In April 2018, she was recognized with the For the Love of Children Award for her contributions to child well-being in the community.

Marne Iwand PT'94
Omaha, Neb., received the Golisano Health Leadership Award from the Special Olympics in May. The award honors health champions and their extraordinary efforts toward fulfilling the goals, values and mission of the Special Olympics global health program. She serves as a physical therapist at the UNMC Munroe-Meyer Institute.

Amy Millar PT'95
Omaha, Neb., recently assumed the position of director of the Midtown Crossing clinic location of Makovicka Physical Therapy.

Joe Kennedy PT'97
Fairbanks, Alaska, was promoted to the rank of commander (O-5) in the United States Public Health Service, Therapist Category. In 2014, he created a new physical therapy program for Tanana Chiefs Conference, Alaska Area Indian Health Service in Fairbanks. Since then, it has developed into rehabilitation services with chiropractic, acupuncture and exercise physiology.

Jennifer O'Brien PT'08
Flagstaff, Ariz., has worked for the U.S. Public Health Service commissioned corps since 2009. She is the chief physical therapist in a busy Indian Health Service clinic in Winslow, Ariz., and earned her orthopedic clinical specialist and clinical electrophysiology specialist certifications in 2011 and 2018. This is her second year presenting the clinical electrophysiology lecture to second-year University of New Mexico physical therapy students.

Matthew Barth PT'12
Kearney, Neb., joined Elite Chiropractic and Physical Therapy in Kearney in May.

Rashelle Hoffman PT'15
Omaha, Neb., is a doctoral student in the UNMC Munroe-Meyer Institute's Department of Physical Therapy. In May, she was selected by the Foundation for Physical Therapy Board of Trustees to receive the 2018 Patricia Leahy Award for outstanding Promotion of Doctoral Studies I application in post-professional studies within neurology. She plans to complete her PhD in the spring of 2020.

Medicine

Thomas Jensen M'55
Safford, Ariz., has been retired from family practice for several years.

Donald Argo M'64
Marysville, Kan., retired after 40 years of active practice and nine years of locum work. The implementation of computer-based technology influenced his decision to retire.

Kathleen Walk M'67
Grand Island, Neb., received the Lifetime Achievement Award by the International Association of Top Professionals in June. In 2017, she was selected as the organization's Top Doctor of the Year and Missionary of the Year. These recognitions are a result of her 40 years of experience

in the health care field and her efforts with Hope International Services, a non-profit organization she founded.

James Talbot M'68, '70
Mesa, Ariz., and his wife, Judy, celebrated their 50th wedding anniversary in March. They have established a scholarship for UNMC students.

Richard Elliott M'70
Sun City West, Ariz., retired Jan. 2 from Banner Medical Group in Phoenix, but reviews selective primary care patient complaints submitted to the Arizona Medical Board.

Roderick Harley P'65, M'70
Lincoln, Neb., retired after 22 years as head women's golf and head men's and women's tennis coach at Nebraska Wesleyan University.

David Anderson M'72
Florence, Ariz., retired from practice Jan. 1. He practiced for 20 years in St. Paul, Minn., and for 10 years in Mesa, Ariz. He has been an adjunct professor of anatomy/physiology at Pinal County Community College since the summer of 2008.

James Armitage M'73, Internal Medicine '74, '75
Omaha, Neb., was selected as one of the 2018 Giants of Cancer Care by OncLive. He was one of 21 who were inducted during the May 31 ceremony. Inductees are respected health care professionals who advance the field of oncology by their contributions to research and clinical practice.

Dale Michels M'73
Walton, Neb., retired July 13 from the Lincoln Family Medical group – the place he helped found in 1974. He currently holds the record for being the longest practicing family physician in Lincoln.

Ronald Pfeiffer M'73
Portland, Ore., visited UNMC in June to present a neurology grand rounds "Gastrointestinal Dysfunction in Parkinson's Disease." Three years ago, he moved to Oregon Health & Science University in Portland as a professor of neurology.

Dennis Ross M'73
Wichita, Kan., received the Lifetime Achievement Award in 2017 from the Wichita Business Journal for his contributions to medicine. The award is given to one or two physicians each year in recognition of their achievements. He and his wife **Ann Ross N'71** received an award from the Wichita Arts Council as the Patron of the Arts, their highest award. They also were elected into the Wichita State University Hall of Fame.

Alan Seifer M'74
Miami, Fla., serves as the senior medical examiner for the Federal Aviation Administration.

Margaret Stockwell M'74
Helena, Mont., enjoys retirement activities, but is sidelined after a total hip replacement in May - her first experience as a patient, other than childbirth.

Alan Sooho M'75
West Newton, Mass., retired from the Department of Veteran Affairs in 2009 and moved back to Boston. He and **David Yoburn M'75** see each other several times a month and he recently began with Cadence Consultants, working on mental health projects.

Michael Wilkins M'75
Lincoln, Neb., retired in 2018 after more than 19 years as vice president and medical director at Mutual of Omaha Insurance Companies in Omaha.

Fredrick McCurdy M'76, GS'76
Corpus Christi, Texas, continues to work fulltime, now for a not-for-profit managed care organization that specializes in Medicaid and CHIP only. He is medical director for STAR Kids, a special program in Texas Medicaid for children and adolescents with special health care needs. He also continues with active participation in resident and medical student education being a clinical professor of pediatrics with Texas A&M University.

Milo Anderson M'78
Fremont, Neb., retired from private practice in Fremont after 35 years. His wife **Cheryl Anderson N'76,** also retired, was his nurse educator/liaison during most of that time. Their son, **Nathan Anderson M'12,** is on the faculty at UNMC.

Robert Wergin M'79
Lincoln, Neb., was recently selected to serve on the board of directors of the American Board of Family Medicine and also asked to serve on the advisory committee to the Secretary of Health and Human Services on Rural Health Policy.

Bev Bohac M'80
Sarona, Wis., retired in 2015, but continues to do some locum tenums work for her former clinic. She also continues to teach at the Eau Claire Family Practice residency program once a month.

Doug Kiburz M'80
Sedalia, Mo., provided the commencement address for the College of Arts & Sciences ceremony at Doane University in May. He is a physician and orthopedic surgeon at the Missouri Orthopedic Institute, medical director of the physical therapy department at Bothwell Regional Health Center and director of their total joint center.

James Linder M'80
Omaha, Neb., was named chief executive officer for the Nebraska Medicine health network in August. He is a practicing pathologist and has been part of the medical staff for years.

Harold Tu M'80, Oral Surgery '82
Minneapolis, Minn., serves as an associate professor and director of the division of oral and maxillofacial surgery in the School of Dentistry at the University of Minnesota. In May, he was appointed to the new, federal Pain Management Best Practices Inter-Agency Task Force that was formed by the U.S. Department of Health and Human Services.

Daniel Gillen M'82
Belleville, Ill., received a Master of Science degree in biosecurity and disaster preparedness from Saint Louis University in May.

Luanne Thorndyke M'83
Shrewsbury, Mass., is the vice provost for faculty affairs and professor of medicine at the University of Massachusetts Medical School. In May, she received the Massachusetts Medical Society's Woman Physician Leadership Award. The honor recognizes outstanding leadership and contributions to patients and the medical profession by a woman physician.

Samuel Smith M'84, Orthopedics '89
Longmont, Colo., worked for many years in private practice in Nebraska and Colorado and at Denver Health Medical Center until this year, when he joined the faculty of the orthopedic department as a spine surgeon.

Heidi Koenig M'85
Louisville, Ky., serves as a tenured professor and academic advisory dean at the University of Louisville School of Medicine. She also is a board member of the Kentucky Society of Anesthesiologists.

Douglas Throckmorton M'85
Potomac, M.D., received the 2017 Outstanding Alumni Award from Hastings College.

Marjorie Heier M'86, Family & General Medicine '89
Grand Island, Neb., celebrated five years of working in Zambia, Africa, as a medical missionary. She said it has been an exciting time, as she saw the Health Professions Council (Licensure Organization in Zambia) recognize the specialty of family medicine and she was given licensure as a specialist.

Miles Tommeraasen M'86, Surgery '88
Ogallala, Neb., became the new general surgeon at Ogallala Community Hospital on July 1.

Michael Johnson M'88
Saint Peters, Mo., was recognized in April with the 2018 Excellence in Health Care Award from the St. Louis American Foundation. He serves as a critical care and internal medicine physician at SSM Health St. Joseph Hospitals in St. Charles and Lake Saint Louis.

William Lydiatt M'88, Otolaryngology '93
Bellevue, Neb., works at the Methodist Estabrook Cancer Center, which recently moved completely to Methodist Hospital, where he continues to care for patients with head and neck cancers. He is the vice chair of the American Joint Committee on Cancer Head and Neck Staging Task Force and co-wrote chapters on head and neck staging for the most recent edition of the Staging Manual.

Joseph Billig M'91
Denver, Colo., is a regional medical director with the Colorado Permanente Medical Group. He and his wife, Amber, live in Denver with two children and two stepchildren.

Curtis Reimer M'92, Family & General Medicine '95
Hastings, Neb., continues to practice family medicine in a partner-owned private practice and serves as a team physician for Hastings High School and Hastings College.

Kim Coleman M'95, Diagnostic Radiology '99
Lincoln, Neb., received the 2017 Physician of the Year Award from the Nebraska Medical Association.

Tonya Kratovil M'96
Kaneohe, Hawaii, retired from the Army in September 2017 after more than 22 years, moved back to Hawaii and works as a pediatric hospitalist in support of the only Level 1 trauma program in Hawaii.

Amy Cannella M'97, Internal Medicine '00, GS'13
Omaha, Neb., received a 2018 Golden Apple Award from the UNMC College of Medicine that recognizes outstanding teaching. The award is given by first- and second-year medical students.

Dan Anderson GS'96, M'98
Omaha, Neb., was named acting chief of cardiovascular medicine in UNMC's Department of Internal Medicine in June 2018. He also is section chief of cardiac electrophysiology in the cardiovascular medicine division.

Daniel Cronk Jr M'01
Signal Mountain, Tenn., joined Erlanger Metabolic and Bariatric Surgery in Chattanooga in May 2017 as a bariatric surgeon. He moved there from Omaha, where he was previously with Methodist Hospital for five years.

Maria Michaelis M'01, Anesthesiology '05
Omaha, Neb., has been awarded the prestigious FASA designation of the Fellows of the American Society of Anesthesiologists. It identifies and promotes members who exhibit the highest standard in professionalism/leadership, advocacy for the profession and patient safety and education.

Angela Brennan M'03, Family & General Medicine '06
St. Paul, Neb., received the Marion D. and Theodore H. Koefoot Jr., M.D. Outstanding Preceptor in Rural Family Medicine Award from UNMC in May.

Matt Devries M'03, Diagnostic Radiology '08
Omaha, Neb., received a 2018 Hirschmann Prize from the UNMC College of Medicine. Fourth-year medical students select the recipients based upon the best instructors who have contributed to their education through innovative educational methods.

Joshua McConkey M'03
Georgetown, Texas, opened up his own freestanding emergency department. He also is active in the U.S. Air Force Reserves and has taken over the medical director position for the 304th Rescue Squadron training Special Forces Pararescue Airmen.

Ryan Ramaekers M'03, Hematology/ Internal Medicine '09
Aurora, Neb., was presented the annual Physician Excellence Award as CHI Health St. Francis in Grand Island, Neb., celebrated National Doctors Day in March. He serves as a medical oncologist at their cancer treatment center.

Sasha Shillcutt M'03, Anesthesiology '07, GS'16
Blair, Neb., published a piece of creative nonfiction in the Journal of the American Medical Association. Her essay, "Rounds," grew from a journal entry that was several years old and deals with the aftermath of losing a patient. Read more insights on her blog, www.becomebraveenough.com.

Casey Beran M'05
Omaha, Neb., was inducted into the Nebraska Football Hall of Fame on Sept. 14. He is an orthopedic surgeon with CHI Health at Creighton University and his wife, **Margaret (Molly) Beran M'05,** is an obstetrician/gynecologist there.

Regan Taylor M'05, Internal Medicine '08
Bellevue, Neb., serves as an assistant professor in internal medicine-general medicine at UNMC and in June received the Excellence in Teaching Award honoring Pioneering Women in Medicine.

Aaron Lanik M'07
Omaha, Neb., was installed as the president of the Nebraska Academy of Family Physicians in March.

Keith Jensen M'10
Houston, Texas, hosted first-year medical student Frantzlee LaCrete at his home while he was completing a summer research experience at MD Anderson.

Caleb Schroeder M'10
Geneva, Neb., joined the Fillmore County Hospital in June as a general surgeon. He serves as a volunteer faculty member at UNMC and is certified in advance trauma life support.

Melissa Teply M'10
Omaha, Neb., started working at UNMC as an assistant professor in general internal medicine in the fall of 2017. Her clinical practice is half outpatient general internal medicine in the Durham Outpatient Center and half outpatient palliative care in the Fred & Pamela Buffett Cancer Center. Her husband, **Benjamin Teply M'10,** joined UNMC in the fall of 2017 as an assistant professor in internal medicine, division of hematology/oncology. His research and clinical practice is focused on genitourinary cancers.

Ariana Bauer M'11, Internal Medicine '14
Omaha, Neb., joined Boys Town Internal Medicine in April.

Tyler Ketterl M'11
Seattle, Wash., in July, joined the faculty at Seattle Children's Hospital and the University of Washington as an assistant professor and medical director of the Adolescent Young Adult Oncology Program.

John Higgins M'12
Omaha, Neb., is a new faculty member of cardiovascular medicine at UNMC, where he serves as an assistant professor. He loves being involved with critically ill patients, the continuity in the clinic setting, academic discussions on rare disease processes and pathophysiology.

Stephen Mohring M'12
Elkhorn, Neb., practices at Nebraska Medicine and has been named medical director for the Patient-Centered Medical Home, Nebraska Medicine Primary Care Clinics and Midtown Clinic (the teaching clinic for internal medicine residents).

Christopher Peters M'12
Omaha, Neb., is a new faculty member at UNMC, serving as an assistant professor in the department of radiology. He has a professional interest in inflammation.

Frank Lin M'13
Tucson, Ariz., finished his urology residency at the University of Arizona in May and is pursuing further surgical training by specializing in female pelvic medicine and reconstructive surgery at UCLA for the next two years.

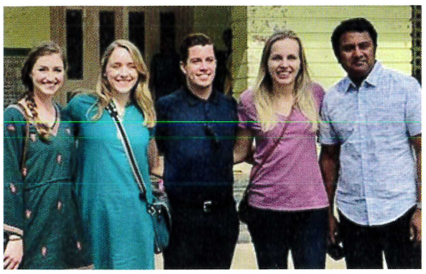
Tiffany Volden M'14
Midvale, Utah, completed a fellowship in geriatric medicine in June and started a full-time position at the Salt Lake City VA providing geriatric care to veterans. She also is an affiliated assistant professor at the University of Utah Geriatrics.

Jenna Allison M'15
Omaha, Neb., along with completing her residency was honored on May 11 at the Creighton-UNMC-Children's 28th Annual Residency & Fellowship Banquet with the 2018 House Officer Clerkship Teaching Award presented by the UNMC Department of Pediatrics.

Kathryn Score M'15
Hot Springs, S.D., completed her family medicine residency in Sioux Falls in June. She is now on staff for Fall River Health Services in Hot Springs.

Kathleen Young M'15
Rochester, Minn., received the 2018 LeeAnn McCaffrey, M.D. Women of Medicine Outstanding Achievement Award for the internal medicine residency program at the Mayo Clinic School of Graduate Medical Education. The award recognizes global excellence in clinical medicine, research and scholarly accomplishments. In July, she began a fellowship in the division of cardiovascular diseases at the Mayo Clinic.

Ashley Janssen, Alyssa Malley, Jenny Shehan and Apollo Stack M'18
Omaha, Neb., all recently graduated from UNMC and traveled to Hyderabad, India, in the spring, where they spent four weeks under the wings of surgical oncology fellows at the Basavatarakam Indo-American Cancer Hospital & Research Institute. UNMC has had an educational partnership with Osmania Medical College in Hyderabad since 2009, but this was the first time any UNMC students traveled to India (more than 700 students have traveled from India to UNMC).



From left, Drs. Alyssa Malley, Jennifer Shehan, Apollo Stack, Ashley Janssen and Chandra Are.

Residency

Robert Rhodes, Family Medicine '97
Lincoln, Neb., was installed as president of the Nebraska Medical Association on Sept. 8, 2017.

Blanca Marky, Neuroscience '02
Carroll, Iowa, joined St. Anthony Regional Hospital in Carroll in August 2017. She assists patients with general neurology needs.

David Mercer, Surgery/Transplant '04
Omaha, Neb., professor, surgery-transplant, for UNMC and director of the intestinal rehabilitation program for Nebraska Medicine, has been named president-elect for Ronald McDonald House Charities in Omaha.

Matthew Lunning, Internal Medicine '10
Omaha, Neb., was named the Man of the Year by the Leukemia & Lymphoma Society – Nebraska Chapter, in March. He and his team, Running4Lunning, raised money to help Nebraska Medicine cancer patients with travel, lodging and meal expenses during treatment. He is an osteopathic physician and a hematologist/oncologist at Nebraska Medicine, and serves as an assistant professor in internal medicine in the UNMC Division of Oncology & Hematology.

Paul Nielsen, Orthopedic Surgery '16
Kearney, Neb., joined New West Sports Medicine & Orthopedic Surgery in Kearney in the fall of 2017.

Sean Walker, Radiology '17
Scottsbluff, Neb., is a physician at Regional West Health Services in Scottsbluff.

Rebecca Thompson, Neurology '17
Lebanon, N.H., joined the faculty of Dartmouth College's Geisel School of Medicine as an assistant professor of neurology in the fall of 2017.

Nursing

Jan Fuccillo N'71
Troutdale, Ore., retired from her nursing career in 2016 after 45 years. Most of her time in nursing was in diabetes management and education at Legacy Health in Portland. She now serves as a volunteer parish nurse at St. Joseph the Worker Catholic Church.

Audrey Nelson N'72
Omaha, Neb., served as the chairperson of the UNMC College of Nursing's Centennial Celebration Committee and, in 2018, the committee received the college's Distinguished Team Award. Additionally, she served as a writer and editor of "A Century of Academic Nursing Excellence: Transforming the Future," the college's centennial history book.

Margaret (Peggy) Everitt N'74
McCook, Neb., retired in May 2017, after 43 years of public/community health, geriatric, school and rural hospital nursing.

Teresa Barry-Hultquist N'80, '82, '96, GS'07
Papillion, Neb., received the Spirit of Shared Governance Award from the UNMC College of Nursing in May. She serves as an associate professor and director of evaluation in the College of Nursing-Omaha Division.

Carol Kilgore N'81
Lincoln, Neb., has been retired for 10 years and participates in Osher Lifelong Learning Institute classes at the University of Nebraska-Lincoln, is an ombudsman, and participates in Stephen Ministry, bible study, book chat, cards, movies, reading and more.

Sarah Schiermeister N'81
Omaha, Neb., began working with Seasons Hospice and palliative care in november 2017, as the national director of clinical operations.

Ann Berger N'84, GS'96
Omaha, Neb., received the Midwest Nursing Research Society's (MNRS) Distinguished Researcher Award from the Symptom Science Research Interest Group during the MNRS conference in April.

Becky Keating-Lefler N'86, '87, '92, GS'01
Omaha, Neb., served on the UNMC College of Nursing's Centennial Celebration Committee and, in 2018, the committee received the college's Distinguished Team Award.

Amy Thimm N'91
Rochester, Minn., served on the UNMC College of Nursing's Centennial Celebration committee and, in 2018, the committee received the College's Distinguished Team Award. She serves as a registered nurse breast cancer care coordinator at the Mayo Clinic. She is the past president of the UNMC College of Nursing Alumni Council.

Karol Johnson N'94
Savannah, Mo., changed jobs from practicing in the medical field for almost 22 years, to now practicing in mental health and substance abuse. She serves as a registered nurse for one of the programs within the Family Guidance Center.

Jessica Bortner N'00
McCook, Neb., was hired in May as the executive director of the Community Hospital Health Foundation. She and her husband, Heath, own and operate a farm/ranch outside of McCook and have a son, Charlie.

Christine Eisenhauer N'03
Norfolk, Neb., received the Pennie Z. Davis Faculty Research Award from the UNMC College of Nursing in May. She serves as an assistant professor and an advanced practice nurse in public health at the college's Northern Division in Norfolk.

Shannon Monheiser N'04
Dix, Neb., has served as the director of nursing for the Kimball County Manor for 10 years and was promoted to nursing home administrator last spring.

Chelsea Enninga N'05, '10, '16
York, Neb., was named the director of the York General Dialysis in April. She is excited to be working in her hometown after previously working in palliative care at CHI-St. Elizabeth in Lincoln and Grand Island.

Sally Heusinkvelt N'05, '08
Rochester, Minn., has served in the division of hospital internal medicine for 10 years at the Mayo Clinic and serves as the assistant program director for the Mayo Clinic School of Health Sciences Acute Care Nurse Practitioner Clinical Residency. She recently received the Outstanding Educator Award from the school for her work within Mayo and the Winona State University Acute Care Nurse Practitioner Program – the only NP program in the state of Minnesota.

Chad Miller N'07
Columbus, Neb., is a certified registered nurse anesthetist at the Columbus Community Hospital and was recently promoted to director of anesthesia.

Erin Thoman N'08, '13
Gretna, Neb., and husband, Jeffrey, have four children, Liam, Ellie, Beckham and Marley. In February, she opened her own practice, Nebraska Home Pediatrics, where she provides house calls for sick children. As the practice grows, she plans to expand to include wellness visits with vaccines.

Douglass Haas N'09, '15
Kearney, Neb., is the president elect for the Nebraska Nurses Association as of October. He serves as a nurse specialist/instructor at the UNMC College of Nursing on the Kearney campus and is working toward his doctorate of nursing practice, as well as a post masters certificate as a family nurse practitioner, through UNMC.

Julie Thies N'10, '14
Doniphan, Neb., joined Family Medicine Specialists, a clinic with Lexington Regional Health Center, in April. She is a nurse practitioner in the field of women's health and works as part of a prenatal team.

Raissa Ameh N'12
Jefferson City, Mo., works for the Missouri Family Health Council as the clinical manager. She serves on the board of directors for the Missouri Center for Nursing and is the health liaison and a founding member for the Mid-Missouri Black Nurses Association.

Pallav Deka N'12, GS'16
Sioux Falls, S.D., received the Outstanding Dissertation Award from the Health Promoting Behaviors Across the Lifespan, during the Midwest Nursing Research Society's conference in April. He teaches graduate courses in the School of Health Sciences PhD program and undergraduate courses in the department of nursing at the University of South Dakota.

Jessica Lothrop N'12
Grand Island, Neb., joined Choice Family Health Care (CFHC) in May as a nurse practitioner. CFHC has clinics in Grand Island and Kearney.

Dilorom (Delia) Djalilova N'13
Omaha, Neb., is pursuing her PhD at UNMC and received first place for her poster, "Yoga and Inflammation: A Systematic Review," during the Midwest Nursing Research Society's conference in April. She also has been accepted into a pre-doctoral fellowship in the Graduate Partnerships Program at the National Institute of Nursing Research.

Vanessa Schott N'14
Shawnee, Kan., graduated with a Doctor of Philosophy in educational leadership and policy – technology from the University of Kansas and accepted a position as a simulation educator and instructional designer.

Michelle Inzauro N'15
Lincoln, Neb., works as a charge nurse in the Grossman Burn Center. She is studying for her doctorate in nursing with a focus on family practice from Creighton University.

Veronica Behm N'16
Alliance, Neb., is an emergency room nurse and loves it. She became board certified in emergency nursing this year.

Pharmacy

William Cady P'71
Lenexa, Kan., retired in 2017 as president of Quality Research Services. He obtained his PharmD in 1976 from the University of Kentucky.

Dave Brehm P'76
St. Paul, Neb., became a member of the Howard County Medical Center Board of Directors in 2017. Dave owns and operates Brehm's Pharmacy.

Ron Karmazin P'77
Blue Hill, Neb., retired in July 2017 after 40 years behind the same counter at his business, Ron's Pharmacy in Blue Hill.

Patrick Woster P'78, GS'87
Charleston, S.C., has been at the Medical University of South Carolina since 2011. He serves as a professor and SmartState™ Endowed Chair in Drug Discovery. He also serves as director of the MUSC Drug Discovery Core, and in 2015 he was appointed chair of the department of drug discovery and biomedical sciences. In 2017, he was elected as a fellow in the Asian Federation of Medicinal Chemistry, and as a fellow in the American Association for the Advancement of Science.

Keith Olsen P'80
Little Rock, Ark., was named dean of UNMC's College of Pharmacy, effective Jan. 7, 2019. He was dean of the College of Pharmacy at the University of Arkansas for Medical Sciences, and recently was named chancellor of the American College of Critical Care Medicine becoming the first pharmacist to lead the national organization.

Jane Mort P'85
Brookings, S.D., was named dean of the College of Pharmacy and Allied Health Professions at South Dakota State University in April. She has served in various roles during her 31 years at SDSU.

Keith Swanson P'85
Edmond, Okla., was named by Gov. Mary Fallon to serve a three-year term on the Oklahoma State Board of Examiners for Long Term Care Administrators. He recently completed his 23rd year on the faculty at the University of Oklahoma College of Pharmacy.

Lisa Potter P'01
Chicago, Ill., was elected to the board of directors for the American Society of Transplantation in June.

Timothy Candy P'02
Omaha, Neb., became a principal consultant for Opus Regulatory as of October 2017. In June, he and his wife, Tami, and kids, Tyler and Teagan, moved back to Nebraska.

Tillara Kruse P'13
Scribner, Neb., owns and operates the Fremont Drugstore and the Scribner Drug Store with her husband, Matthew. She serves as the pharmacist for the Scribner Drug Store.

Dentistry

Richard Bush D'59
Kearney, Neb., and his wife, Barbara, were recognized in May with the Ron & Carol Cope Cornerstone of Excellence Award, presented by the University of Nebraska at Kearney. This is UNK's highest campus honor and annually recognizes individuals who have provided significant service, support and promotion of UNK, the greater Kearney area, the state of Nebraska and higher education.

Robert Santoro D'72
San Diego, Calif., sold his dental practice of 40 years, but still works three to four days each week. His wife, Georgene (Gina) Santoro, passed away from a 16-month battle with stomach cancer on June 12, 2017. He received the Dentist of the Year Award for La Mesa, Calif.

Paul Hansen D'75
Lenexa, Kan., retired in May as a professor and director of dental implants at UNMC's College of Dentistry. He was honored by the students of the classes of 2017 and 2018 with the Battenhorst Teaching Award, given to the most influential teacher in the college. In his retirement, he will serve as the assistant director for the Advanced Education in General Dentistry program at the University of Missouri - Kansas City School of Dentistry.

Sam Jacoby D'78
Bridgeport, Neb., was inducted into the Nebraska Dental Association Hall of Fame in April. He has served two communities in the Nebraska panhandle for 40 years – his practice in Bridgeport and part-time in Hemingford. In addition, he is active as a dental licensure examiner for a regional testing agency.

Linda Pilant D'78
Concord, Calif., worked for Contra Costa Health Services Department from 1978-2007, where she was the manager for Public Health Dental Programs for children and families. From 2008-present, she has served as a clinical dental hygienist at La Clinica de la Raza, FQHC Clinic. She also provides private dental hygiene services for the elderly, disabled or people with limited access to care through her business, Smiles on the Move.

Robin Grossenburg D'83
Yankton, S.D., retired March 1, and sold his practice to **Paige Elwood D'09.**

Deborah Weichel D'01
Plymouth, Neb., received certification as a transformational lifestyle coach and is continuing her education by studying to become a naturopathic doctor.

Christina Pruitt D'10
Ashland, Neb., joined the Nebraska Institute of Comprehensive Dentistry in 2016. She and her husband, **Chase Pruitt '10,** have two children, Maxwell and Maverick. She assisted Chase in opening Omaha Oral Surgery in 2016.

Lori Tima D'12
Greeley, Colo., joined Smile Doctors in northern Colorado and Wyoming in the spring.

Thomas Sanders D'14
Omaha, Neb., opened his own dental office, Sanders Family Dental, in Gretna, Neb., in October 2017. He and his wife, **Stacey Sanders N'13 '14,** have two children, Anthony and Aubrey.

Jacob Stines D'14
Grand Island, Neb., joined Stec Cosmetic and Family Dentistry in June. After dental school, he was commissioned to the rank of captain with the U.S. Air Force and completed a one-year advanced education residency at Offutt Air Force Base in Bellevue, Neb. He spent three years serving as the chief of clinical dentistry at McConnell Air Force Base in Wichita, Kan. He and his wife, Toni, have two sons.

Jacob Zitterkopf D'15
Westminster, Colo., practices as an orthodontist in Denver. He is grateful for his mentors at UNMC and the University of the Pacific for providing him with the skills to make people's smiles brighter.

Megan Eitemiller D'18
Crawford, Neb., joined Horizon West Dental Clinic in June. She enjoys cooking, hiking and spending time with family.

Public Health

Judy Anderson PH'05
Indianapolis, Ind., retired in 2016 from her career as a pediatric nurse practitioner primarily working with low income families.

Brandon Grimm PH'05, GS'13
Papillion, Neb., was named the associate dean of practice for the UNMC College of Public Health in July. He also serves as the interim director of the master's programs and associate professor of health promotion.

Jumoke Omojola PH'06
Omaha, Neb., completed her Master of Social Work degree with a clinical concentration from the University of Nebraska at Omaha in 2012. She works in a private mental health practice in Omaha, where she assists adults in learning skills and getting the tools they need to create happier, healthier lives and/or cope with mental health challenges.

Caryn Vincent PH'14
Lincoln, Neb., is working on her Doctor of Public Health (DrPH) degree in health policy, healthcare management, and leadership at the Johns Hopkins Bloomberg School of Public Health.

Angela Sucha PH'15
Clearwater, Neb., joined the medical staff of Antelope Memorial Hospital in Neligh, Neb., as a physician assistant in September 2017. She is a board certified physician assistant and completed the PA program at Wichita State University in Kansas in July 2017.

Mariah Morgan PH'16, '17
Aurora, Neb., joined the Hamilton County Extension Office in May as the food, nutrition and health educator.

Becky Squiers PH'16
Kearney, Neb., was named the new executive director of the HelpCare Clinic in Kearney in June. She is responsible for overseeing administrative duties, programming, clinic operations, management of staff and strategic planning. She also manages marketing and outreach, fundraising and financial accountability.

Graduate Studies

Karl Zeiler GS'61, '95, '04
Beverly Hills, Calif., retired in June 2016 after 56 years of orthodontics practice.

Dale Clark GS'73
Spring, Texas, serves as the department head of Value Based Medicine & Quality Programs at Houston Methodist.

Stephen Bruttig GS'80
Murdock, Neb., completed his postdoctoral work in physiology at the University of Virginia School of Medicine, and then joined the Army as a captain (research physiologist). He worked in experimental pathology (cold injury) and spent most of his career in hemorrhage, shock, trauma and resuscitation research. In the end, he was program director for Combat Casualty Care Research, and was coordinator for Army, Navy, Air Force and Marine efforts in Combat Casualty Care. With a colleague, he started the Advanced Technology Applications in Combat Casualty Care meetings, which are one of the premier trauma meetings in the country.

Amy Brower GS'01
Dakota Dunes, S.D., is a medical geneticist working on several projects at the American College of Medical Genetics and Genomics in Bethesda, Md., as part of the Eunice Kennedy Shriver National Institute of Child Health and Human Development's (NICHD) Newborn Screening Translational Research Network (NBSTRN). Her research with NBSTRN is supported through a 10-year, $23 million contract with NICHD, and she directs a team that develops informatics platforms to collect, analyze, visualize and share longitudinal clinical and genomic research data.

Nancy Fahrenwald GS'02
College Station, Texas, was named dean and professor of the College of Nursing at Texas A&M University, effective June 1. She previously served as dean and professor of the College of Nursing at South Dakota State University.

Kimberly Latacha GS'02
Omaha, Neb., received the 2017 Basic Science Outstanding Teaching Award from the UNMC College of Medicine and the Class of 1962. The award, which includes a $10,000 stipend, is given annually to recognize UNMC's best basic science teachers. She serves as an assistant professor and vice chair for medical education for the Department of Genetics, Cell Biology and Anatomy.

Douglas Zatechka Jr GS'02
Cordova, Tenn., is the co-founder and chief science officer of US Biologic, Inc., a One Health Initiative and biologistics company that is implementing an oral delivery technology platform to control the spread of zoonotic disease.

Christine Cutucache GS'12
Bellevue, Neb., received an Alumni Outstanding Teaching Award from the University of Nebraska at Omaha Alumni Association in April, in honor of distinguished teaching in the classroom. She serves as an assistant professor in UNO's Department of Biology in the College of Arts & Sciences.

Tiffany Moore GS'12
Elkhorn, Neb., received the Ada M. Lindsey Professional Service Award from the UNMC College of Nursing in May. She serves as an assistant professor in the College of Nursing-Omaha Division.

Haley Peters GS'12
Elkhorn, Neb., started as a medical science liaison, specializing in solid tumor oncology, for Janssen Pharmaceuticals, in March for Nebraska, the Dakotas and Montana.

Kelly Stauch GS'12
Omaha, Neb., received the Vada Kinman Oldfield Alzheimer's Research Fund Award, and **Katherine Olson GS'17** received the Nancy and Ronald Reagan Alzheimer's Scholarship Fund Award in April.

Beth Burbach GS'13
Norfolk, Neb., received the Donna Westmoreland Excellence in Faculty Mentoring Award from the UNMC College of Nursing in May. She serves as an assistant professor for the college's Northern Division in Norfolk.

Tess Eidem GS'13
Boulder, Colo., was promoted to associate director of education for the STROBE NSF Center on Real-Time Functional Imaging. Her role is to aid in the development, organization and implementation of programs and projects to promote and improve imaging science education (K-12, undergraduate and graduate), STROBE trainee professional development, and broadening participation in science, technology, engineering and mathematics.

Ann Anderson Berry GS'14, Pediatrics Residency '01
Omaha, Neb., was promoted to professor with tenure in the UNMC Department of Pediatrics on July 1.

In Remembrance...

Harland Hermann Sr M'42, '43
Sturgis, S.D., June 19, 2018

William Yoachim M'45
Fairbury, Neb., April 15, 2018

Marion Alberts M'48
Clive, Iowa, June 10, 2018

Martha Eskov N'48
Elk Horn, Iowa, May 3, 2018

Margaret J. Miller M'49
San Francisco, Calif., May 5, 2018

Donald L. Severson P'49
Omaha, Neb., April 24, 2018

Richard Hemphill D'52
Denver, Colo., April 19, 2018

Karl F. Niehaus M'53
Omaha, Neb., May 29, 2018

Ruth Sisler MLS'56
Alliance, Neb., May 16, 2018

Richard P. Clemens M'57, '59
Omaha, Neb., April 15, 2018

Clem W. Hagedorn M'57
Delray Beach, Fla., May 6, 2018

Edward E. Biever M'58
Sun City West, Ariz., May 21, 2018

John W. Dirksen P'59
Washington, Utah, April 22, 2018

Lester L. Reemts P'59
Kimball, Neb., July 16, 2018

Edward W. Sandall M'60
West Palm Beach, Fla., April 3, 2018

Sue A. Hausserman-Dugan M'69, '71
La Mesa, Calif., July 15, 2018

Gary J. Cheloha P'72
Lincoln, Neb., July 25, 2018

Lynne K. Kulisek N'72
Omaha, Neb., May 28, 2018

Karla L. Bryant PT'73
Gothenburg, Neb., April 29, 2018

Janice R. Lassek MLS'73, M'94
Omaha, Neb., May 28, 2018

Christopher J. Wrenn M'73
Tyler, Texas, June 1, 2018

William C. Daniel GS'74
Lake Mary, Fla., June 6, 2018

James M. Plate M'74
Ogallala, Neb., June 11, 2018

Marilyn J. Grossenbacher MLS'76
Lincoln, Neb., July 4, 2018

Clifton C. Lynam N'81, '83
Omaha, Neb., May 19, 2018

Allan D. Wilsey M'84, Family & General Medicine '87
Papillion, Neb., May 11, 2018

Cheryl C. Rodgers N'89
Rougemont, N.C., July 7, 2018

Randall L. Rademacker P'91
Irwin, Iowa, June 25, 2018

Alison E. Slosburg GS'16
Omaha, Neb., June 28, 2018

Births

Kathleen Brandert PH'04
Omaha, Neb., and her husband, Corey, welcomed their fourth child, a son, Cameron August, on March 22, 2018.

Sara Holland PA'06
Madison, Wis., and husband, Tim, welcomed a son, Thomas John, in March 2017.

Lyndsey Casaceli N'07
Imlay City, Mich., and husband, David, welcomed a daughter, Francesca Louise, on Dec. 18, 2017. She joins brother David and sister Lucille.

Emily Griess N'08
Hastings, Neb., and husband, Josh, welcomed a son, Johnathan Thomas, on March 30, 2018.

Melissa Hall PA'09
Lexington, Neb., and husband, Jesse, welcomed their second child, a daughter, Addison Rose, in March 2018.

Ashley Chrisman PA'10
Niwot, Colo., and husband, Joe, welcomed their second child, a son, Jack David, on Feb. 18, 2018. He joins brother Theodore Thomas.

Jessica Naaf N'12
Fort Dodge, Iowa, and husband, Jonathan, welcomed a daughter, Ellie Rose, on May 29, 2018.

Hilary Nevrivy MITS'13
Grand Island, Neb., welcomed a daughter on June 18, 2017.

Hailey Battle N'14
Omaha, Neb., welcomed a daughter, Luna, on March 2, 2018.

Morgan Meissner PA'14
Hospers, Iowa, and husband, Steve, welcomed a daughter, Maren Irene, on June 25, 2018.

Marriages

Erin Baum N'01, PH'09 & Tamir Ayad
Morrison, Colo., Sept. 9, 2018

Suzanne Clabaugh GS'10
& Adam Birnley
Council Bluffs, Iowa, Nov. 4, 2017

Haley Brummer N'17
& Tyler Kennan
Norfolk, Neb., June 9, 2018

Alysha Garber PA'17
& Brody McLean
Ashland, Neb., April 21, 2018

Elisa Rempe PT'17
& Jacob Zeiss
Wymore, Neb., Oct. 7, 2017

Kaitlyn Gillett PT'18
& Aaron Rosenstiel
Cedar Falls, Iowa, July 21, 2018

We love hearing from you! Please send your professional and personal news for Class Notes to:

UNMC Alumni Relations
985200 Nebraska Medical Center
Omaha, NE 68198-5200

Phone: 402.559.4385
Toll free: 888.725.8664
Email: alumni@unmc.edu
Website: unmc.edu/alumni

Prefer to receive UNMC Connect electronically?

Send your request and email address to: **alumni@unmc.edu.**

Please be sure to indicate if you are a UNMC alum.

See more class notes online at unmc.edu/alumni

2019 UNMC ALUMNI ASSOCIATION EVENTS

For more information about these events, please visit us online at **unmc.edu/alumni.**

FEB. 14, 2019
Alumni Night on the Court
A UNMC & UNO Alumni Engagement Event
UNO Basketball game at Baxter Arena
Omaha, Neb.

FEB. 17, 2019
UNMC in the Desert
Scottsdale, Ariz.

APRIL 18, 2019
College of Medicine Alumni Council John S. Latta Lectureship with Victor J. Dzau, M.D.

APRIL 23, 2019
UNMC Alumni Showdown in O-Town
Nebraska vs. Creighton Baseball Game
Omaha, Neb.

OCT. 4–5, 2019
UNMC College of Dentistry Alumni Reunion
Lincoln, Neb.

OCT. 11–12, 2019
UNMC Alumni Reunion Weekend for the Colleges of Medicine, Nursing & Graduate Studies Program
Omaha, Neb.

SEPT. 30 – OCT. 11, 2019
Masterpiece Montage
Trip for UNMC Alumni & Friends
10 night cruise – Rome to Barcelona

OCT. 29 – NOV. 9, 2019
Cuba Charms
Trip for UNMC Alumni & Friends
10 night cruise – Miami to Cuba and back

TWIST IN LIFE'S ROAD LEADS ATHLETE TO UNMC

by Kalani Simpson

UNMC graduate Ralph Abalo lives the American dream.

Ralph Abalo graduated earlier this year with a master of perfusion science degree from the College of Allied Health Professions. Today he's working in Carbondale, Ill., as a clinical perfusionist. His career has only just begun, but he is loving it.

But, wait. This isn't the beginning. His story begins on May 22, 2004. He knows the exact date, because that is when he first came to the United States.

"It's a blessing not given to everybody," he said.

He came from the nation of Togo, in West Africa, to play soccer, at Bellevue University in Omaha. But he blew out his knee before his Bruins career even began, underwent surgery, went home. And then he came back to Nebraska – with academics as his top priority.

Without a soccer scholarship, he took a job working in environmental services at UNMC. He cleaned patient rooms and clinical areas. He started to think about a career in health care.

Running late to an environmental services staff meeting one day, he bumped into Nebraska Medicine executive Marty Carmody, who now lives in Michigan. Not long after their chance meeting, Carmody was at his daughter's youth soccer game and was impressed by how the referee diffused a potentially volatile situation. It was Abalo! Carmody approached him after the game – Abalo worked at the med center, went to school and now soccer games, too?

When Abalo applied for health professions programs at Clarkson College, Carmody wrote a letter of recommendation. Abalo eventually earned degrees in radiation technology and medical imaging. He later became certified in sterile processing.

He also was blessed with an American wife, Blythe, and they had an American son, Richmond. Then, Abalo became an American, too, in 2011.

And he enrolled in UNMC's clinical perfusion program. His long-term goal is to someday bring heart surgery (clinical perfusionists operate heart-lung machines during these surgeries) to Togo. Today, those who need heart surgery must have enough money to leave the country.

Currently, he's getting soccer balls and school supplies to the kids of his old hometown, all while juggling the responsibilities of work, family, and, oh yes, recently completing another health professions degree.

"It has not been easy for me," or, he added, his wife. But they managed it. They are settled now.

His parents couldn't make his UNMC graduation. But his American family, his in-laws, were there.

Now, he is in Illinois. He works at a hospital, part of the Southern Illinois Healthcare system. "I am loving it here so far," he said. He is registered as a soccer referee in Illinois and in St. Louis.

It is the end of one story, but the beginning of another. He is determined the children of Togo won't have to come to America to be successful. But, he is so happy that he has.

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